

# OCCUPANT PROTECTION SYSTEMS

## AIRBAG SUPPLEMENTAL RESTRAINT SYSTEM

**INFORMATION**

Ford urges careful consideration of the recommendations that follow. They are based on analyses of component and vehicle tests, actual service situations, and engineering judgments. Disregard of these recommendations may affect the durability, reliability, handling and performance characteristics of a completed vehicle and may result in elevated underbody temperatures, increase the potential for fire, or may affect the safety of the occupants in the event of an accident.

These recommendations are supplemental to U.S. and Canadian Motor Vehicle Safety compliance representations provided in the *Incomplete Vehicle Manual* (IVM). Also, additional information is provided in the *Ford Truck Service Manual* which may be helpful to subsequent stage manufacturers.

The completed vehicle in the "Loaded" condition must not exceed the front GAWR, rear GAWR, or the GVWR. ("Loaded" means the completed vehicle weight with the maximum fluid capacity necessary for vehicle operation, plus 150 lb for each designated seating position, and an additional allowance for any cargo weight advertised by the manufacturer). The GAWRs and GVWR are on the label affixed to the cover of the *Incomplete Vehicle Manual*.

Subsequent Stage Manufacturers are encouraged to contact the Ford Truck Body Builder Advisory Service if they have any questions concerning these recommendations.

**AIRBAG SUPPLEMENTAL RESTRAINT SYSTEM**

Some trucks produced by Ford Motor Company are equipped with an Airbag Supplemental Restraint System (SRS). Vehicles equipped with this system will have the words "AIRBAG" and an air bag symbol on the VIN plate located on the top driver-side corner of the instrument panel. System components are shown in their vehicle locations on the following pages.

Included on the vehicle identification number -VIN- plate (visible through the windshield) of the vehicle, manufactured by Ford with a driver's air bag, are the words "AIR" and "BAG" and a pictogram for the airbag separating the two (see illustration below).



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Detailed system and service information will be found in the *Ford Truck Service Manual* for the appropriate type and model year. Ford Motor Company urges the subsequent stage manufacturers to become familiar with this system prior to modifying vehicles that are so equipped.

**CAUTION:**

DO NOT REMOVE THE STEERING COLUMN, STEERING WHEEL AND AIRBAG MODULE AS AN ASSEMBLY FROM THE VEHICLE UNLESS (1) THE COLUMN IS LOCKED TO PREVENT ROTATION, OR (2) THE LOWER END OF STEERING SHAFT IS SECURED (e.g., by wire) IN SUCH A WAY THAT THE STEERING WHEEL CANNOT BE ROTATED.

**WARNING:**

**THE SEAT BELT BUCKLE PRETENSIONER, AIRBAGS AND ELECTRONIC SENSOR MODULE ARE BAR CODED WITH A UNIQUE SERIAL NUMBER WHICH IS MATCHED TO THE VEHICLE VIN. TO MAINTAIN THE OCCUPANT PROTECTION SYSTEM PERFORMANCE, THE COMPLETED VEHICLE MUST CONTAIN THE SAME SEAT BELT BUCKLE PRETENSIONER, AIR BAGS AND ELECTRONIC SENSOR MODULE THAT WERE INSTALLED BY FORD MOTOR COMPANY. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY IN THE EVENT OF A COLLISION.**

If electrical work is performed in the steering column area, the instrument panel or the air bag system, the system must be deactivated to avoid unwanted inflation of the air bag. To do this, follow the procedure described on this page.

**DEACTIVATION PROCEDURE**

1. Disconnect all negative battery cable(s), and power supplies (if equipped).
2. Wait 1 minute. This is the time required for backup power supply in diagnostic monitor to deplete its stored energy.

**WARNING:**

**TO AVOID ACCIDENTAL DEPLOYMENT AND POSSIBLE PERSONAL INJURY, THE BACKUP POWER SUPPLY MUST BE DEPLETED BEFORE REPAIRING OR REPLACING ANY AIRBAG SUPPLEMENTAL RESTRAINT SYSTEM (SRS) COMPONENTS. TO DEplete THE BACKUP POWER SUPPLY ENERGY, DISCONNECT THE BATTERY GROUND CABLE AND WAIT ONE MINUTE. BE SURE TO DISCONNECT AUXILIARY BATTERIES AND POWER SUPPLIES (IF EQUIPPED).**

**WARNING:**

**CARRY A LIVE AIRBAG MODULE WITH THE AIRBAG AND TRIM COVER POINTED AWAY FROM YOUR BODY. THIS WILL REDUCE THE RISK OF INJURY IN THE EVENT OF AN ACCIDENTAL DEPLOYMENT.**

**WARNING:**

**DO NOT SET A LIVE AIRBAG MODULE DOWN WITH THE TRIM COVER FACE DOWN.**

3. Remove fasteners retaining driver airbag module to steering wheel. Disconnect driver airbag connector and remove the bag from steering wheel. Place the bag on a flat surface with trim cover facing upward. Connect an Airbag Simulator (Part # 105-R0012 in the Rotunda Tool catalog) to the air bag connector on the wire harness in the steering wheel.
4. Disconnect passenger airbag module connector and replace it with an Airbag Simulator (Part # 105-R0012 in the Rotunda Tool catalog) to the airbag connector on the wire harness in the I/P.
5. Reconnect all negative battery cables and power supplies (if equipped).

**REACTIVATION PROCEDURE**

1. Disconnect all negative battery cable(s) and power supplies (if equipped).
2. Wait 1 minute for backup power supply to deplete stored energy.
3. Remove Airbag Simulator and reconnect driver airbag connector. Position driver airbag on steering wheel and secure with fasteners (10mm). Tighten fasteners to 2.7-3.7 Nm.[24-32 in-lb].
4. Remove Airbag Simulator and reconnect passenger airbag connector.
5. Reconnect all negative battery cables and power supplies (if equipped).
6. PROVE-OUT the system.

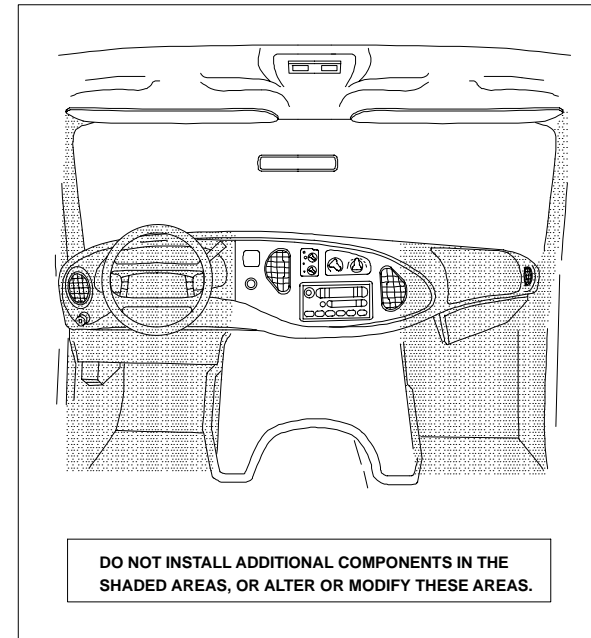
**PROVE-OUT SYSTEM PROCEDURE**

Prove-out system means to turn the ignition switch from OFF to RUN and visually monitor the airbag indicator. The airbag will light continuously for approximately six seconds and then turn off. If an airbag system fault is present, the indicator will either fail to light, remain lit continuously or light in a flashing manner. The flashing manner may not occur until approximately 30 seconds after the ignition switch has been turned from OFF to RUN. This is the time required for the diagnostic monitor to complete the testing of the airbag system. If the airbag indicator is inoperative and an airbag system fault exists, a tone will sound in a pattern of five sets of five beeps. If this occurs, the airbag indicator will need to be serviced before further diagnosis can be done.

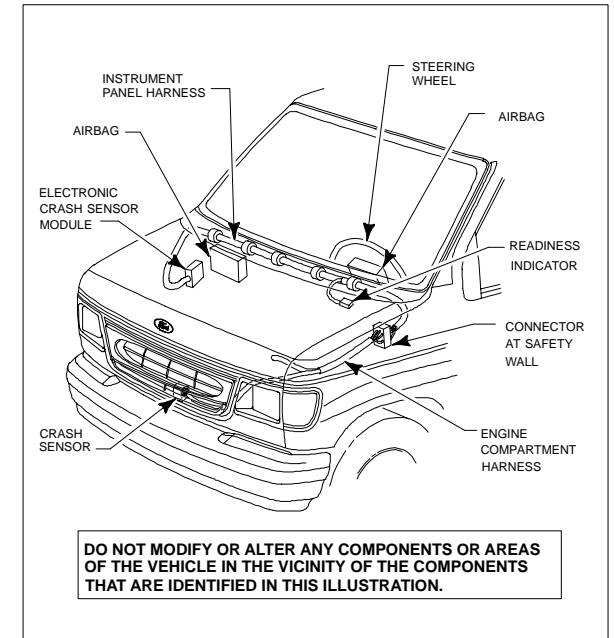
# OCCUPANT PROTECTION SYSTEMS AIRBAG SUPPLEMENTAL RESTRAINT SYSTEM

**AIRBAG USAGE CHART**

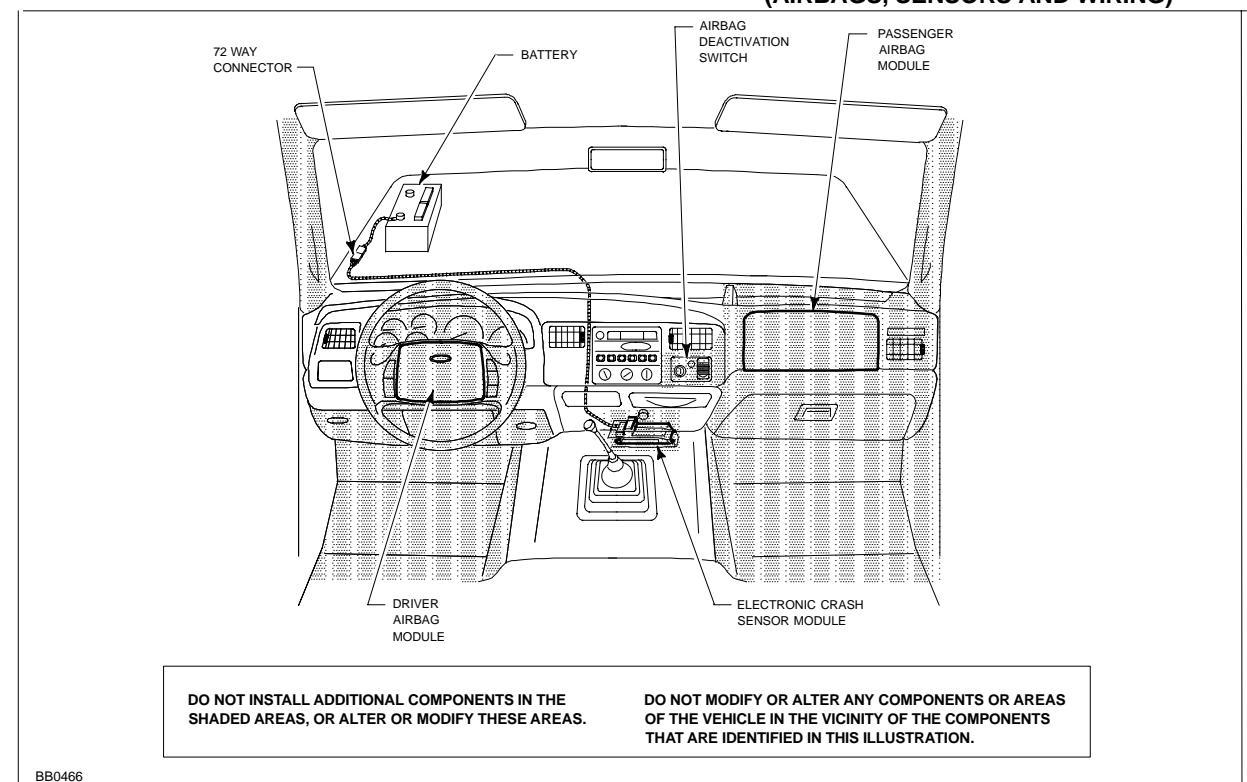
VEHICLE	DRIVER	PASSENGER
Windstar	Standard Front Optional Side	Standard Front Optional Side
Escape	Standard Front Optional Side	Standard Front Optional Side
Explorer	Standard Front Optional Side	Standard Front Optional Side
Explorer Sport	Standard Front Optional Side	Standard Front Optional Side
Explorer Sport Trac	Standard Front Optional Side	Standard Front Optional Side
Ranger	Standard Front	Standard Front
Expedition	Standard Front	Standard Front
Excursion	Standard Front	Standard Front
F150	Standard Front	Standard Front
E-Series Wagon	Standard Front	Standard Front
E-Series Vans	Standard Front	Standard Front
E-Series Cutaway	Standard Front	Standard Front
E-Series Stripped Chassis	—	—
Super Duty F-Series Pickups	Standard Front	Standard Front
Super Duty F-Series Pickup Box Delete and Chassis Cabs	Standard Front	Standard Front (Includes deactivation switch except with Crew Cab models)



**FIGURE A - ECONOLINE OCCUPANT PROTECTION ZONE**



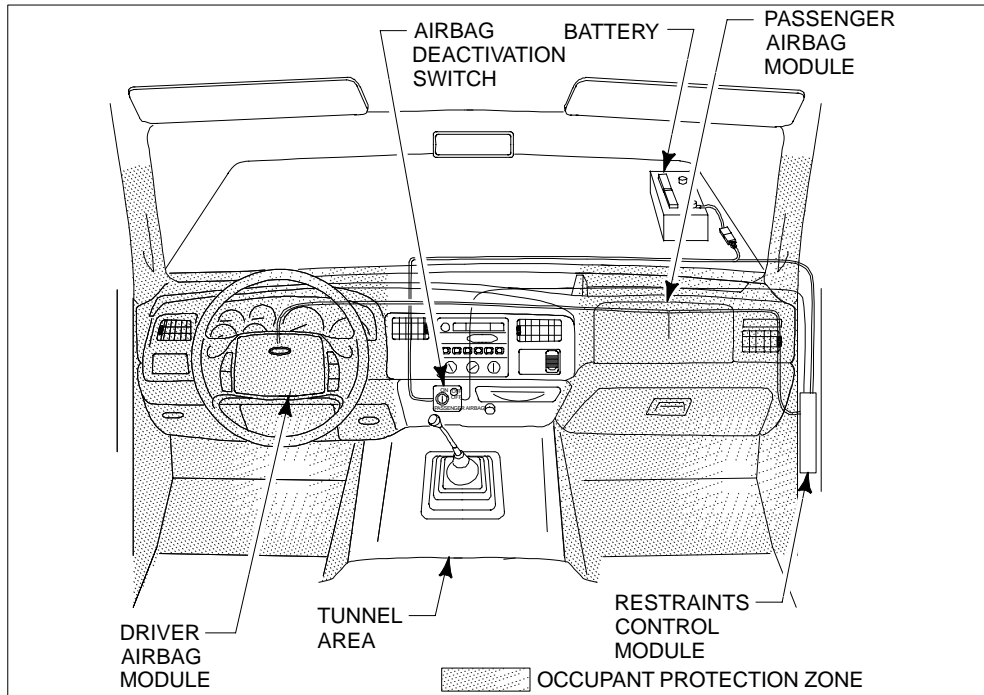
**FIGURE B - ECONOLINE SUPPLEMENTAL RESTRAINT SYSTEM (AIRBAGS, SENSORS AND WIRING)**



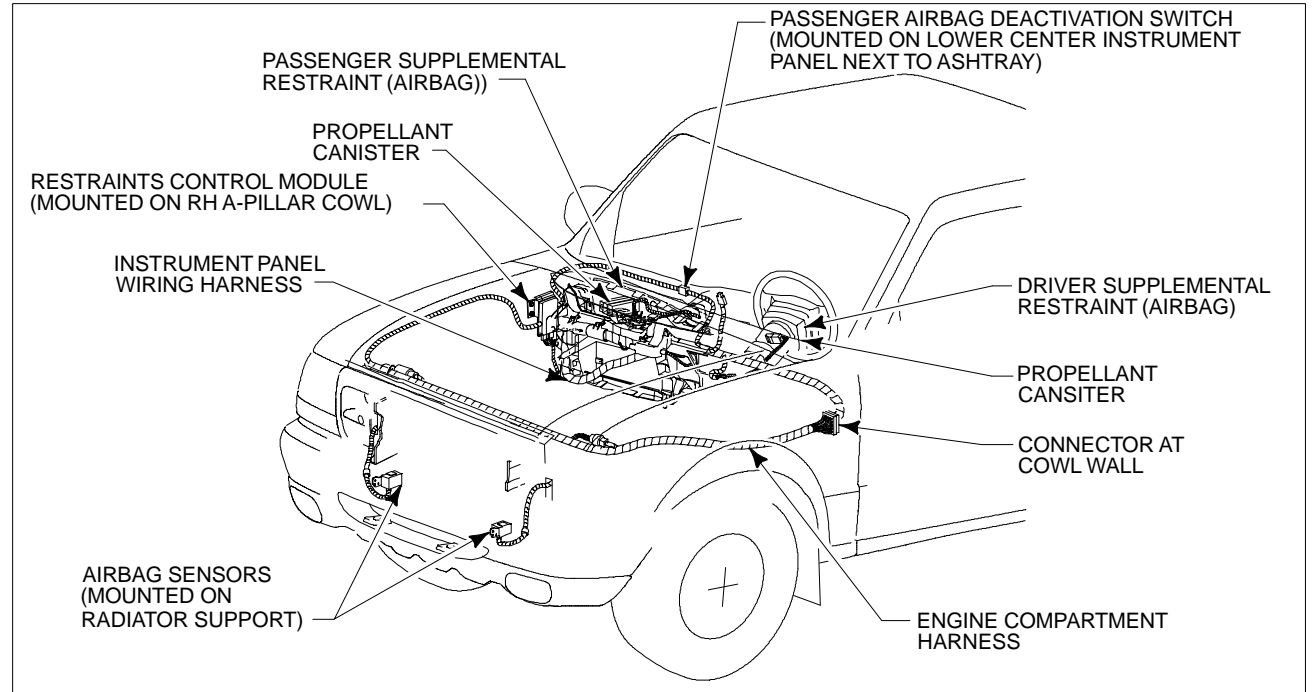
**FIGURE C - SUPER DUTY F-SERIES OCCUPANT PROTECTION ZONE**

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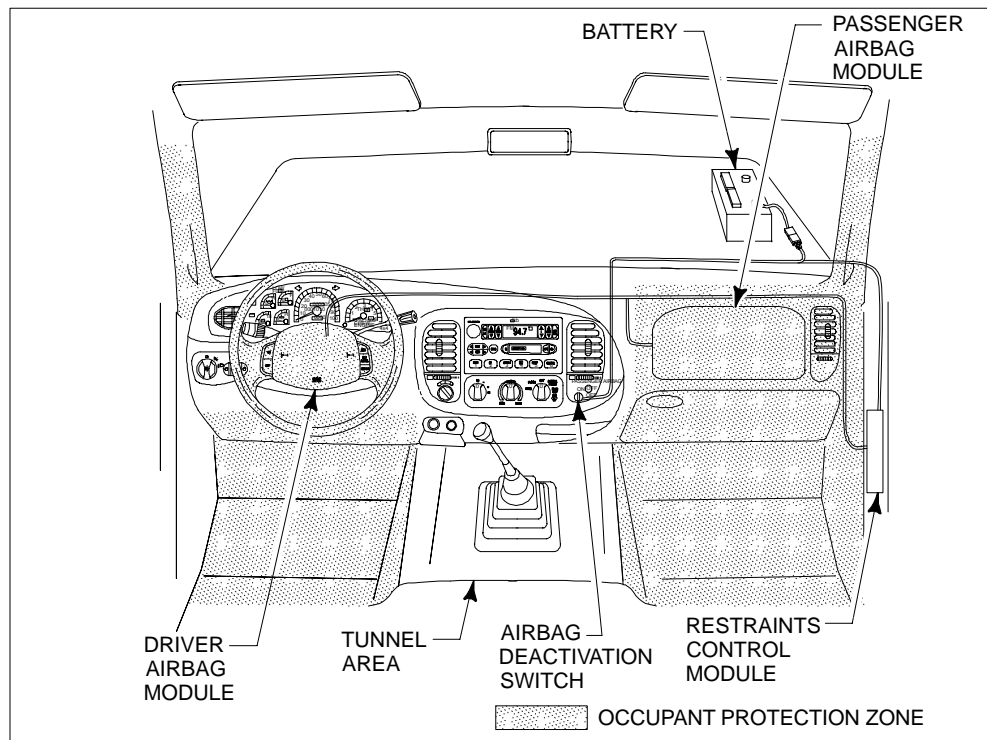
## AIRBAG SUPPLEMENTAL RESTRAINT SYSTEM



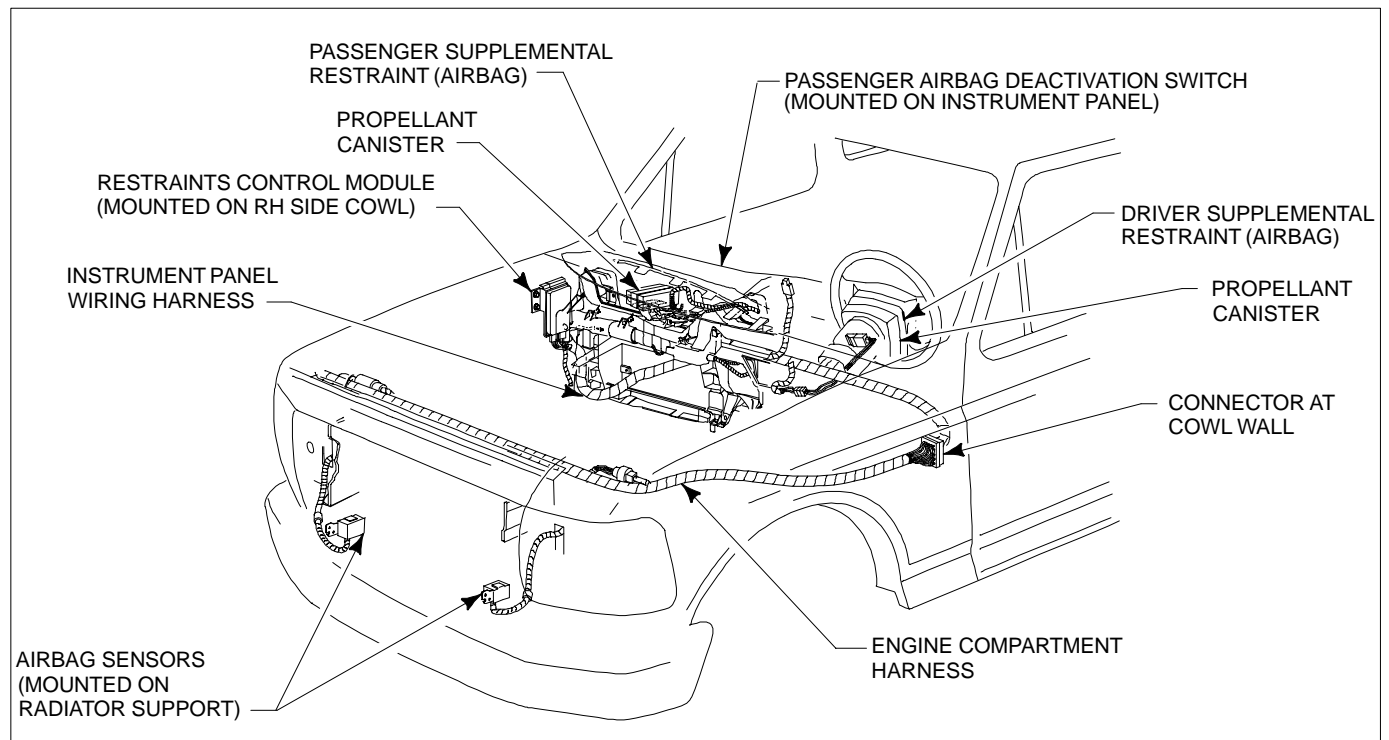
**FIGURE A - RANGER OCCUPANT PROTECTION ZONE**



**FIGURE B - RANGER SUPPLEMENTAL RESTRAINT SYSTEM (AIRBAGS, SENSORS AND WIRING)**



**FIGURE C - F-150 OCCUPANT PROTECTION ZONE**



**FIGURE D - F-150 SUPPLEMENTAL RESTRAINT SYSTEM (AIRBAGS, SENSORS AND WIRING)**