ABOUT THIS MANUAL

Ford Motor Company salutes the towing industry and applauds you for your many fine years of service to the automotive industry. We will continue to work with you to provide our customers and yours with damage-free towing.

This manual contains the latest towing procedures for 2002 Ford, Lincoln and Mercury passenger cars and light trucks. As you turn the pages of this book, you will find the instructions easy to follow with clear illustrations showing the correct hook-up for damage-free towing.

As an additional safety measure, be sure you use safety chains on every tow, including wheel lift and flat bed hook-ups. This will prevent you from losing the vehicle in the event of equipment failure or vehicle breakage at the tow chain attachment.

New materials and aerodynamic styling require new methods of towing to eliminate the possibility of vehicle towing damage. Wheel lifts and flatbed equipment are required to tow many vehicles. Refer to the instructions given for the specific vehicle you are towing.

FOREWORD

This manual contains information and procedures for towing Ford Motor Company passenger cars and light trucks using slingbelt wrecker equipment.

CAUTION: To avoid personal injury and/or vehicle damage, carefully follow procedures in this manual.

NOTE: Due to the many variations of wheel lift and flat bed equipment, instructions for their usage are not included in this manual. Refer to the instruction manuals supplied with wheel lift and flat bed equipment.

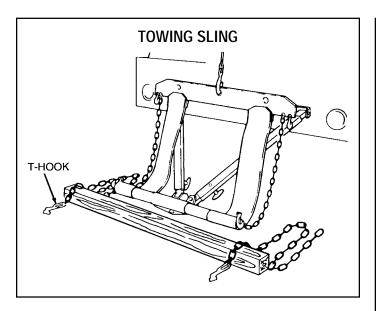
TABLE OF CONTENTS

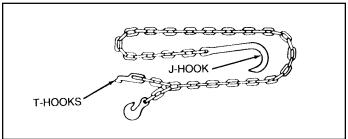
Foreword	Page 1
TOWING EQUIPMENT	5
GENERAL TOWING INFORMATION — PASSENGER CARS	6
WRECKER TOWING FORD VEHICLES WITH AIR BAGS	7
PASSENGER CAR TOWING	
Escort, Escort ZX2	8-9
Cougar	10-11
Taurus, Sable	12-13
Mustang	14-15
Town Car, Crown Victoria, Grand Marquis	16-17
Continental	18-19
Focus	
Lincoln LS	22-23
Thunderbird	24-25

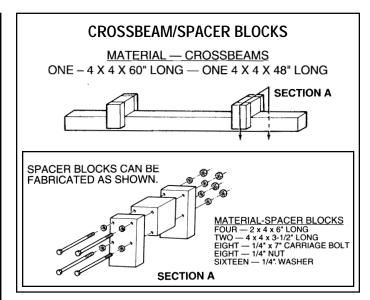
TABLE OF CONTENTS

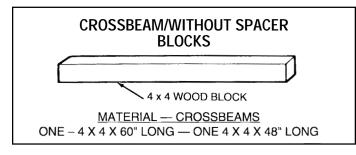
Pag	је
GENERAL TOWING INFORMATION — LIGHT TRUCKS 26-2	28
WRECKER TOWING FORD VEHICLES WITH AIR BAGS 2	29
LIGHT TRUCK TOWING	
Windstar 30-3	
Villager	34
Explorer, Mountaineer	36
Sport-Trac, Sport	38
Ranger	10
F-150, Lightning, NASCAR Special Edition, Harley Davidson	
Supercrew, F-250, Navigator, Expedition, Blackwood	11
F Super Duty (F-250, F-350, F-450, F-550)	43
Excursion	
Escape	
E-Series, Club Wagon, E-150, E-250, E-350, E-Sport 48-4	
2002 FORD SERVICE INFORMATION	50

TOWING EQUIPMENT









GENERAL TOWING INFORMATION — PASSENGER CARS

IMPORTANT SAFETY NOTICE

NOTES AND CAUTIONS

As you read through the procedures, you will come across NOTES and CAUTIONS. Each one is there for a specific purpose. NOTES give you added information that will help to complete a particular procedure. CAUTIONS are given to prevent you from making an error that could damage the vehicle.

Preparatory Steps

Release the parking brake, and place transmission/transaxle in NEUTRAL. As a general rule, vehicles should be towed with the drive wheels off the ground. If the vehicle is to be towed on its drive wheels, the transmission/transaxle and differential must be operable. If the transmission/transaxle is not operable, place the rear wheels on a dolly or disconnect the rear driveshaft on rear wheel drive vehicles. DO NOT disconnect the driveshaft on Lincoln LS, Thunderbird or Mustang; refer to the caution in Lincoln LS, Thunderbird or Mustang portion of this manual. If the differential is not operable, place the rear wheels on a dolly.

When a vehicle is towed on its front wheels, the steering wheel must be clamped in the straight ahead position with a steering wheel clamping device designed for towing service use, such as those provided by towing system manufacturers.

Do not use the vehicle's steering column lock to lock the wheels in a straight ahead position when towed from the front or rear. If the ignition key is not available, place a dolly underneath the

driving wheels of the vehicle and tow with the non-drive wheels raised.

Flat Beds

When using a flatbed to transport a vehicle, always use T-hooks inserted in the appropriate tie down slot. Never fasten J-hooks to any suspension or driveline component because J-hooks will damage driveline and suspension components. When using winches, take care to avoid damaging the bumper system, lower body panels, or air dams.

On vehicles equipped with an air suspension system, be sure the air suspension service switch is turned off prior to vehicle tie down. Refer to Owner Guide for switch location.

CAUTION: Improperly tying down a disabled vehicle may damage the vehicle's suspension, driveline or body parts.

Towing Slings

To avoid possible damage to bumper system, lower body panels, or air dams, a belt sling should be used to lift and tow all vehicles. When attaching towing slings, take care to avoid damage to license plate and frame, or fog lamps, if equipped.

Towing Speeds

See specific model instructions for vehicle towing speed and distance limitations.

UNLTD = Unlimited speed or mileage.

On rough pavement, the maximum towing speed is 35 mph (55 km/h). Maximum towing speed of 35 mph (55 km/h) should be used whenever the tow truck operator is not sure of road surface condition.

WRECKER TOWING FORD VEHICLES WITH AIR BAGS

General Information

An air bag is highly unlikely to deploy during wrecker towing. Standard wrecker towing or recovery procedures on an air bag equipped vehicle should not cause air bag deployment. Only a significant frontal or side (if equipped with side air bags) impact that closes two crash sensors will deploy an air bag.

How to Determine if a Ford Vehicle has Air Bags

- The fourth position of all Ford VINs is the letter:
 - "C" if equipped with driver-side only air bag.
 - "L" if equipped with both a driver and a passenger-side air bag; or
 - "B" or "P" if not equipped with an air bag.
- The steering wheel hub will also be larger and more rectangular (about 6 inches x 9 inches). The passenger-side air bag module trim covers will be moulded with "SRS" or "AIR BAG".
- The VIN plate may have "AIR BAG" printed on it.

Is it Necessary to Disable the Air Bag System for Wrecker Towing?

 Disabling the air bag system is **not** necessary in most cases. But, as a precaution, disconnect the battery ground (-) cable in a safe manner. **NOTE**: Turning the ignition switch to OFF may **not** disable the Ford air bag system. Some older model air bag deployment systems operate independently of the ignition key position.

Wrecker Towing a Vehicle with Deployed Air Bags

- Deployed air bags are not dangerous.
- Any powdery residue consists of corn starch or talcum powder and sodium compounds, mostly sodium carbonates (e.g., baking soda) accompanied by very minute deposits of sodium hydroxide that can be irritating to the skin and eyes but poses no long term health hazard.

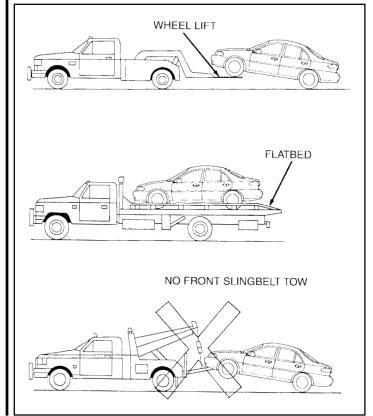
ESCORT, ESCORT ZX2

FRONT TOWING CONNECTIONS

CAUTION: It is recommended that the Escort be towed with a wheel lift or flatbed equipment. Do not tow from the front with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

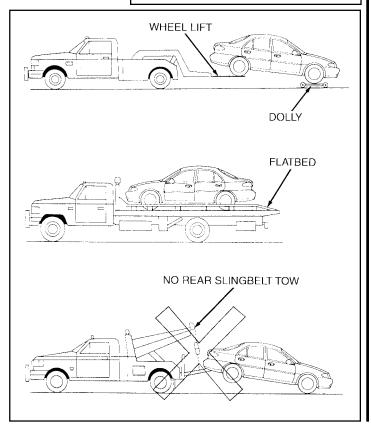
TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD
MANUAL	UNLTD	UNLTD







TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD
MANUAL	UNLTD	UNLTD



ESCORT, ESCORT ZX2

REAR TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

CAUTION: If the vehicle is to be towed from the rear using wheel lift equipment,

the front wheels (drive wheels) must be placed on a dolly to prevent damage to the transaxle.

CAUTION: It is recommended that the Escort be towed with a wheel lift or flatbed equipment. Do not tow from the rear with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

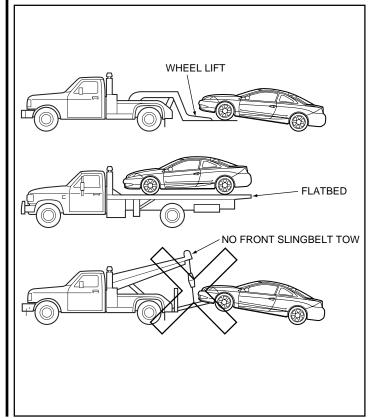
COUGAR

FRONT TOWING CONNECTIONS

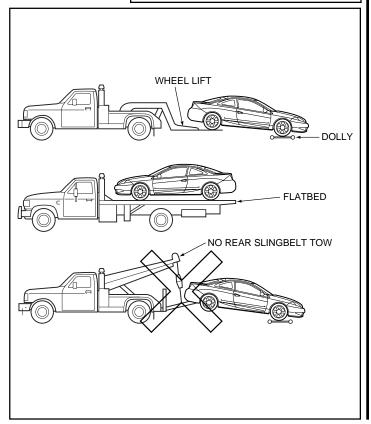
CAUTION: It is recommended that the Cougar be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed from the front by other means or incorrectly, vehicle damage may occur.

TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD
MANUAL	UNLTD	UNLTD





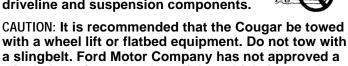
TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD
MANUAL	UNLTD	UNLTD



COUGAR

REAR TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.



with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed from the rear by other means or incorrectly, vehicle damage may occur.

TAURUS, SABLE

FRONT TOWING CONNECTIONS

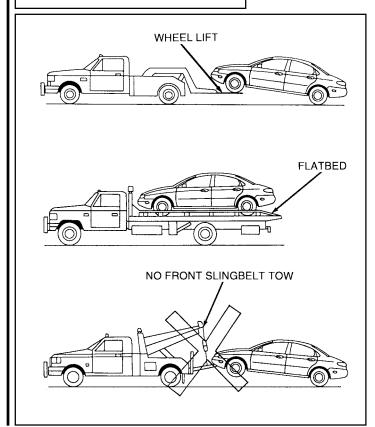
CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

CAUTION: Use care not to damage fog lamps on vehicles, if equipped.

CAUTION: It is recommended that the Taurus, Sable be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

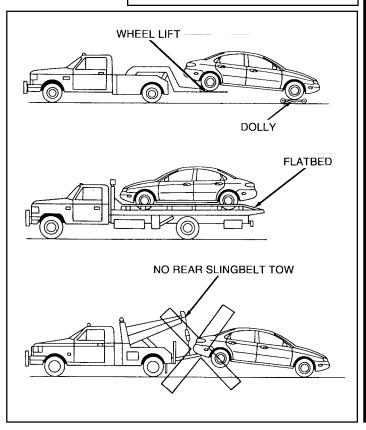
TRANS	MPH/KMH	MILES/KMS
AUTO	35/56	50/80







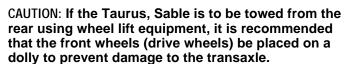
TRANS	MPH/KMH	MILES/KMS
AUTO	35/56	50/80



TAURUS, SABLE

REAR TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage lower control arms.



CAUTION: Do not use shipping slots on bumper brackets for towing.

CAUTION: It is recommended that the Taurus, Sable be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

MUSTANG

FRONT TOWING CONNECTIONS

CAUTION: Do not tow from the front with T-hooks or J-hooks under any circumstances.



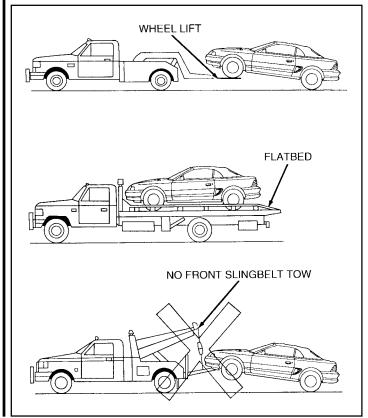
CAUTION: Do not disconnect the driveshaft since the system is aligned and balanced.

CAUTION: It is recommended that the Mustang be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

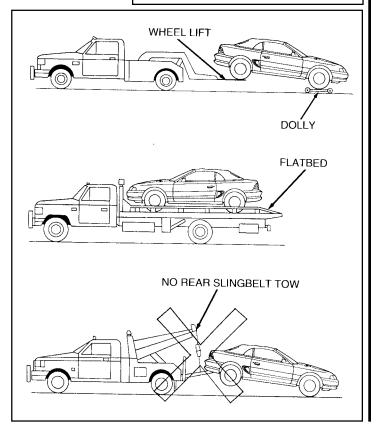
CAUTION: Cobra vehicles must be towed with flatbed equipment only. 4x4 blocks must be placed under the end of the inclined ramp to allow for bumper clearance. Failure to use 4x4 blocks may result in damage to the front fascia.

TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80
MANUAL	35/55	UNLTD





TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD
MANUAL	UNLTD	UNLTD



MUSTANG

REAR TOWING CONNECTIONS

CAUTION: Do not tow with T-hooks or J-hooks under any circumstances. J-hooks will damage driveline and suspension components.



CAUTION: Do not disconnect the driveshaft since the system is aligned and balanced.

CAUTION: If the vehicle is to be towed from the rear using wheel lift equipment,

the front wheels must be placed on a dolly to prevent damage to the front fascia (bumper).

CAUTION: It is recommended that the Mustang be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

CAUTION: Cobra vehicles must be towed with flatbed equipment only. 4x4 blocks must be placed under the end of the inclined ramp to allow for bumper clearance. Failure to use 4x4 blocks may result in damage to the front fascia.

TOWN CAR, CROWN VICTORIA, GRAND MARQUIS

FRONT TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

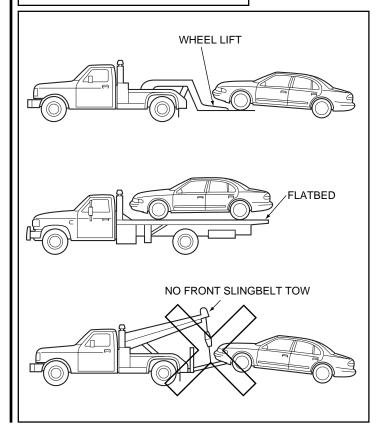


CAUTION: Before the vehicle can be towed, the air suspension control in the luggage compartment must be turned to the OFF position (if equipped).

CAUTION: It is recommended that the Town Car, Crown Victoria and Grand Marquis be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

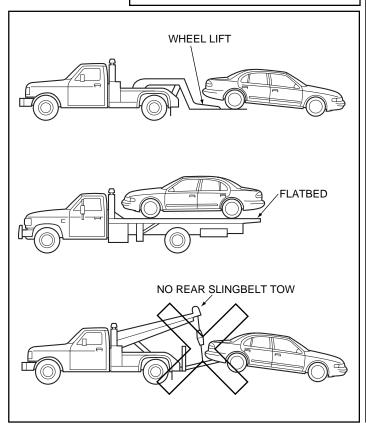
TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80







TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD



TOWN CAR, CROWN VICTORIA, GRAND MARQUIS

REAR TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

CAUTION: Before the vehicle can be towed, the air suspension control in the luggage compartment must be turned to the OFF position (if equipped).

CAUTION: It is recommended that the Town Car, Crown Victoria and Grand Marquis be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

CONTINENTAL

FRONT TOWING CONNECTIONS

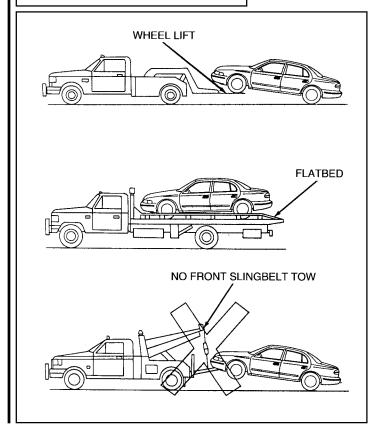
CAUTION: Do not tow with J-hooks under any circumstances. J-hooks may damage driveline or suspension components.

CAUTION: Before the vehicle can be towed, the air suspension control in the luggage compartment must be turned to the OFF position (if equipped).

CAUTION: It is recommended that the Continental be towed with a wheel lift or flatbed equipment. Do not tow the vehicle from the front using slingbelt equipment. However, if your vehicle has experienced a failure in the air suspension system and is in the full down position, then the vehicle must be towed from the rear using a slingbelt with T-hooks. See REAR TOWING CONNECTIONS on the next page for procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

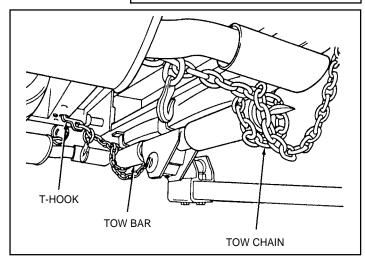
TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80







TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80



REAR TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks may damage driveline or suspension components.



CAUTION: Before the vehicle can be towed, the air suspension control in the luggage compartment must be turned to the OFF position (if equipped).

CONTINENTAL

CAUTION: If the Continental is to be towed from the rear using wheel lift or slingbelt equipment, the front wheels (drive wheels) must be placed on a dolly to prevent damage to the transaxle.

CAUTION: It is recommended that the Continental be towed with a wheel lift or flatbed equipment. Do not tow the vehicle from the front using slingbelt equipment. However, if your vehicle has experienced a failure in the air suspension system and is in the full down position, then the vehicle must be towed from the rear using a slingbelt with T-hooks. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

NOTE: Refer to general towing information on pages 6 and 7 before towing vehicle.

NOTE: Do not go faster than 35 mph (55 km/h) or farther than 50 miles (80 km). If you do, you could damage the transaxle. If more speed or distance is necessary, place the front wheels on dollies.

SLINGBELT TOWING FROM THE REAR

NOTE: The towbar will deform the soft fascia (bumper). The soft fascia will return to an acceptable shape.

• Use T-hooks in T-hook slots only.

FOCUS

FRONT TOWING CONNECTIONS

CAUTION: It is recommended that the Focus be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed from the front by other means or incorrectly, vehicle damage may occur.

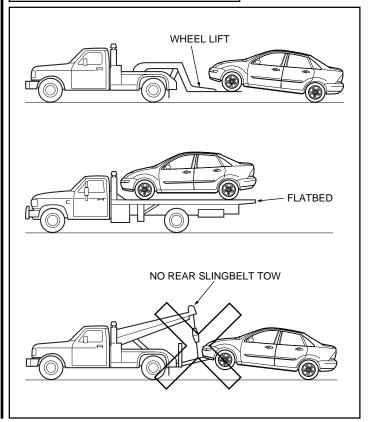
CAUTION: If the brake-shift interlock is not deactivated, the tires cannot roll. If it is necessary to use this procedure to move the gearshift lever, it is possible that a fuse has blown and the vehicle's brakelamps may not be working. Refer to fuses and relays in the Roadside Emergencies chapter. If you cannot move the gearshift lever from P (Park) with the brake pedal depressed, proceed as follows:

- 1. Turn the ignition off and remove the ignition key.
- 2. Apply the parking brake and the brake pedal.
- 3. Insert a screwdriver or similar tool about 5 cm (2 inches) into the square opening to the right of the gearshift, at the base of the console.
- 4. Rotate the screwdriver point rearward.
- 5. Push and hold the thumb button and move the gearshift.
- 6. Remove the screwdriver when the gearshift moves from the P (Park) position.

The console-mounted gearshift will lock when you turn the key to the lock position. When the gearshift is in any position except P (Park), the ignition key cannot be removed from the steering column. To remove the key, the gearshift lever must be in P (Park). Once the gearshift is in the desired position, release the brake pedal and use the accelerator as necessary.

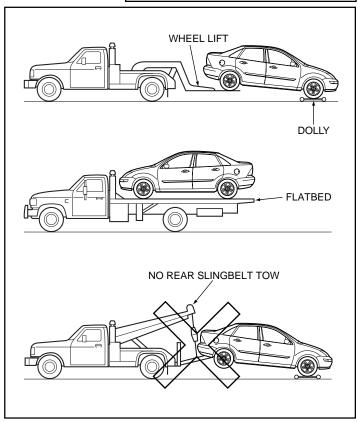
TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD
MANUAL	UNLTD	UNLTD







TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD
MANUAL	UNLTD	UNLTD



REAR TOWING CONNECTIONS

DO NOT TOW WITH SLINGBELT EQUIPMENT. Ford Motor Company has not developed or approved a Thook slingtype procedure. Use wheel lift or flatbed equipment.

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.



CAUTION: If the vehicle is to be towed from the rear, using wheel lift equipment, the front wheels (drive wheels) must be placed on a dolly to prevent damage to the transaxle.

CAUTION: It is recommended that the Focus be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure.

If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

LINCOLN LS

FRONT TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks may damage driveline or suspension components.

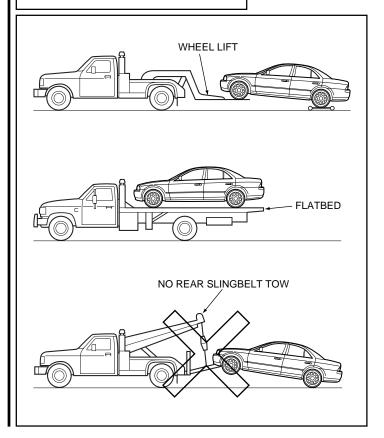
CAUTION: Do not disconnect the driveshaft since the system is aligned and balanced.

CAUTION: It is recommended that the Lincoln LS be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

CAUTION: It is recommended that the vehicle be pulled onto a flatbed tow truck with the tow hook attached to a canvas strap, to prevent damage to the bottom of the front or rear bumper covers. If a strap is not available, wrap the tow cable with a cloth.

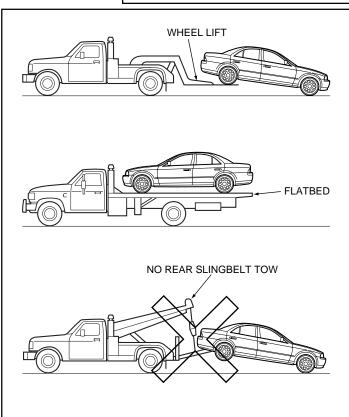
TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80







TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD



LINCOLN LS

REAR TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

CAUTION: Do not disconnect the driveshaft since the system is aligned and balanced.

CAUTION: It is recommended that the Lincoln LS be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

CAUTION: It is recommended that the vehicle be pulled onto a flatbed tow truck with the tow hook attached to a canvas strap, to prevent damage to the bottom of the front or rear bumper covers. If a strap is not available, wrap the tow cable with a cloth.

THUNDERBIRD

FRONT TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks may damage driveline or suspension components.

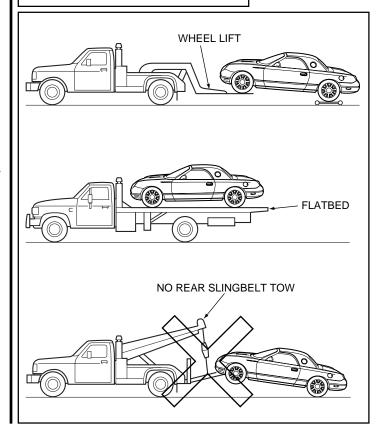
CAUTION: Do not disconnect the driveshaft since the system is aligned and balanced.

CAUTION: It is recommended that the Thunderbird be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

CAUTION: It is recommended that the vehicle be pulled onto a flatbed tow truck with the tow hook attached to a canvas strap, to prevent damage to the bottom of the front or rear bumper covers. If a strap is not available, wrap the tow cable with a cloth.

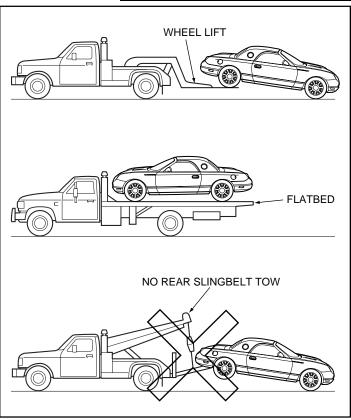
TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80







TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD



THUNDERBIRD

REAR TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

CAUTION: Do not disconnect the driveshaft since the system is aligned and balanced.

CAUTION: It is recommended that the Thunderbird be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

CAUTION: It is recommended that the vehicle be pulled onto a flatbed tow truck with the tow hook attached to a canvas strap, to prevent damage to the bottom of the front or rear bumper covers. If a strap is not available, wrap the tow cable with a cloth.

GENERAL TOWING INFORMATION — LIGHT TRUCKS

IMPORTANT SAFETY NOTICE

NOTES AND CAUTIONS

As you read through the procedures, you will come across NOTES and CAUTIONS. Each one is there for a specific purpose. NOTES give you added information that will help to complete a particular procedure. CAUTIONS are given to prevent you from making an error that could damage the vehicle.

Preparatory Steps

Release the parking brake and place the transmission/ transaxle in NEUTRAL. As a general rule, vehicles should be towed with the drive wheels off the ground. If the vehicle is to be towed on its drive wheels, the transmission/transaxle and differential must be operable. If the transmission/transaxle is not operable, place the rear wheels on a dolly or disconnect the rear driveshaft (on rear wheel drive vehicles). If the differential is not operable, place the rear wheels on a dolly.

When a vehicle is towed on its front wheels, the steering wheel must be clamped in the straight ahead position with a steering wheel clamping device designed for towing service use, such as those provided by towing system manufacturers.

Do not use the vehicle's steering column lock to lock the wheels in a straight ahead position when pulled from the rear. If the ignition key is not available, place a dolly underneath the drive wheels of the vehicle and tow with the non-drive wheels raised.

WARNING: DO NOT TOW VEHICLE BACKWARD WHEN TOWING THE VEHICLE WITH ALL FOUR WHEELS ON THE GROUND.

When towing the vehicle with all four wheels on the ground, the steering wheel should be left unlocked.

Towing Four-Wheel Drive Vehicles with Lever-Operated Transfer Case

- Place the transmission/transaxle (automatic or manual) in N (NEUTRAL).
- 2. Place the transfer case in N (NEUTRAL).

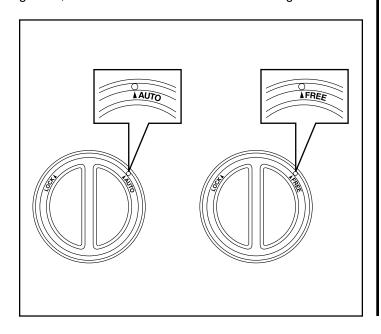
NOTE: The transfer case NEUTRAL setting is located between 4H and 4L. In order to place the transfer case in NEUTRAL, the lever must be moved slightly to the left and rearward of the 4H position. With the ignition in the ON position, both the 4x4 and LOW RANGE indicator lights will be off when the transfer case is in NEUTRAL. For vehicles with electric shift, the transfer case selector should be in 2WD mode.

GENERAL TOWING INFORMATION — LIGHT TRUCKS

3. Set the manual locking hubs in AUTO or FREE position.

NOTE: Place the locking hub into the AUTO or FREE position. To verify the system is in the NEUTRAL position, the front driveshaft should turn freely.

Vehicle speed should not exceed 55 mph (90 km/h). This applies with either the front or rear wheels off the ground, or both front and rear wheels on the ground.



Towing Four-Wheel Drive Vehicles with Electronic Shift Transfer Case

- Place the transmission (automatic or manual) in N (NEUTRAL).
- 2. Place the transfer case in 2H (HIGH).

NOTE: Both the 4x4 and LOW RANGE indicator lights will be off when the transfer case is in 2H (HIGH).

3. Disengage the automatic locking hubs.

Once these three conditions are met, follow instructions for towing two-wheel drive vehicles.

Towing speed is limited to 35 mph (55 km/h) and 50 miles (80 km) with the drive wheels on the ground.

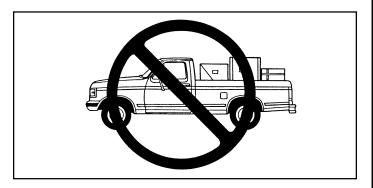
WARNING: NEVER USE A TOW BAR THAT ATTACHES TO THE BUMPER WHEN TOWING THE VEHICLE. THE BUMPER COULD BE DAMAGED AND CAUSE AN ACCIDENT.

NOTE: If a distance of 50 miles (80 km) and/or a speed of 35 mph (55 km/h) is exceeded, disconnect the driveshaft of the rolling axle(s). Towing speed should not exceed 50 mph (80 km/h).

CAUTION: Improper towing of the vehicle could result in transmission and/or transfer case damage. Always follow the outlined towing procedures. It is recommended that only an unloaded vehicle be towed.

GENERAL TOWING INFORMATION — LIGHT TRUCKS

IF TOWING WITH A LOAD IS UNAVOIDABLE, CARE MUST BE TAKEN TO PROPERLY RESTRAIN LOAD FROM SHIFTING AND DISTRIBUTE THE LOAD EVENLY IN THE PICKUP BOX.



Flat Beds

CAUTION: Improperly tying down a disabled vehicle may damage the vehicle's suspension driveline or body parts.

Towing Slings/Chains/Hooks

To avoid possible damage to bumper system, lower body panels or air dams, a belt sling should be used to lift and tow all vehicles. When attaching towing slings, take care to avoid damage to license plate and frame, or fog lamps, if equipped.

CAUTION: Use caution when attaching tow hooks and safety chains to vehicle. Position and remove hooks with care to avoid damage to brake hoses, brake lines and steering linkage components.

NOTE: On vehicles equipped with bumper guards, make sure the towbar is under the bumper and the weight of the vehicle is not supported by the bumper guards.

Towing Speeds

See specific model instructions for vehicle towing speed and distance limitations.

UNLTD = Unlimited speed or mileage.

On rough pavement, the maximum towing speed is 35 mph (55 km/h). Maximum towing speed of 35 mph (55 km/h) should be used whenever the tow truck operator is not sure of road surface conditions.

WRECKER TOWING FORD VEHICLES WITH AIR BAGS

General Information

An air bag is highly unlikely to deploy during wrecker towing. Standard wrecker towing or recovery procedures on an air bag equipped vehicle should not cause air bag deployment. Only a significant frontal impact that closes two crash sensors will deploy an air bag.

How to Determine if a Ford Vehicle has Air Bags

- The fourth position of all Ford VINs is the letter:
 - "C" if equipped with driver-side only air bag.
 - "L" if equipped with both a driver and a passenger-side air bag; or
 - "B" or "P" if not equipped with an air bag.
- The steering wheel hub will also be larger and more rectangular (about 6 inches x 9 inches). The passengerside air bag module trim covers will be moulded with "SRS".

Is it Necessary to Disable the Air Bag System for Wrecker Towing?

- Disabling the air bag system is **not** necessary in most cases.
- As a precaution, disconnect the battery in a safe manner, when the vehicle has significant damage to the front of the vehicle and an undeployed air bag.

NOTE: Turning the ignition switch to OFF will **not** disable the Ford air bag system. The air bag deployment system operates independently of the ignition key position.

Wrecker Towing a Vehicle with Deployed Air Bags

- Deployed air bags are **not** dangerous.
- Any powdery residue consists of corn starch or talcum powder and sodium compounds, mostly sodium carbonates (e.g., baking soda) accompanied by very minute deposits of sodium hydroxide that can be irritating to the skin and eyes but poses no long term health hazard.

WINDSTAR

FRONT TOWING CONNECTIONS — SLINGBELT

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

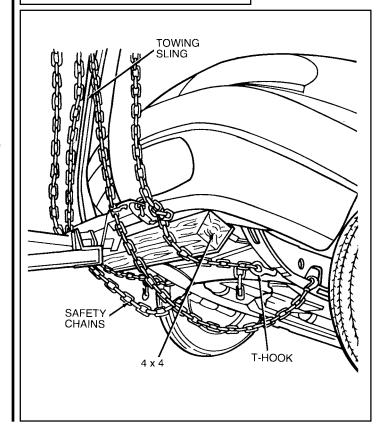


CAUTION: It is recommended that the Windstar be towed with a wheel lift or flatbed equipment. However, a slingbelt with T-hooks can also be used. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

- Insert T-hooks in T-hook slots on the bottom of the frame rail.
- Place a 4x4 under front bumper and against the air dam.
- Position towbar against 4x4.
- Attach safety chains around stabilizer bar at the insulators.

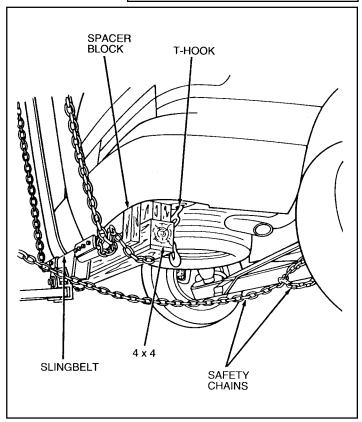
TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD







TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80



WINDSTAR

REAR TOWING CONNECTIONS — SLINGBELT

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

CAUTION: If the Windstar is to be towed from the rear using wheel lift or slingbelt equipment, the front wheels (drive wheels) must be placed on a dolly to prevent damage to the transaxle.

CAUTION: It is recommended that the Windstar be towed with a wheel lift or flatbed equipment. However, a slingbelt with T-hooks can also be used. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

- Insert T-hooks in T-hook slots at bottom of frame rail.
- Place spacer blocks and 4x4 crossbeam behind bumper and across frame rails. Make sure that spacer blocks are under frame rails.
- Place towbar against 4x4.
- Attach safety chains around rear axle inboard of coil springs.

WINDSTAR

FRONT TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

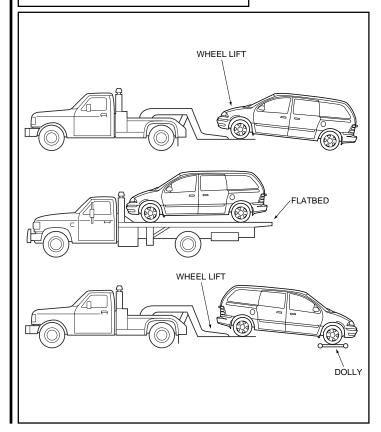
er O

CAUTION: If the Windstar is to be towed from the rear using wheel lift or slingbelt equipment, the front wheels (drive wheels) must be placed on a dolly to prevent damage to the transaxle.

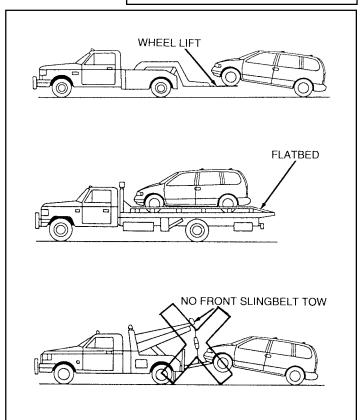
CAUTION: It is recommended that the Windstar be towed with a wheel lift or flatbed equipment. However, a slingbelt with T-hooks can also be used. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80





TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD



VILLAGER

FRONT TOWING CONNECTIONS

DO NOT TOW WITH SLINGBELT EQUIPMENT. Ford Motor Company has not developed or approved a T-hook slingtype procedure.

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.



CAUTION: It is recommended that the Villager be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

VILLAGER

to the transaxle.

REAR TOWING CONNECTIONS

DO NOT TOW WITH SLINGBELT EQUIPMENT. Ford Motor Company has not developed or approved a T-hook slingtype procedure.

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

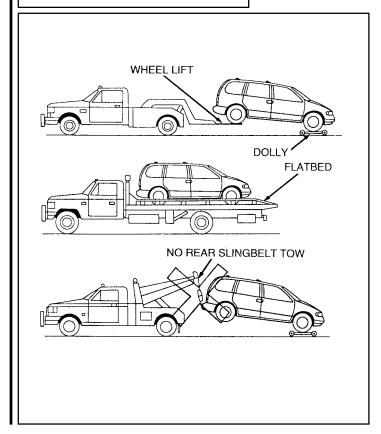
driveline and suspension components.

CAUTION: If the Villager is to be towed from the rear using wheel lift equipment, the front wheels (drive wheels) must be placed on a dolly to prevent damage

CAUTION: It is recommended that the Villager be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

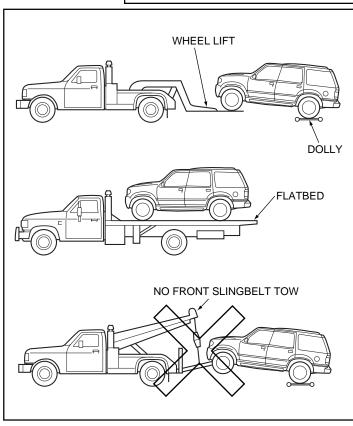
TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD







TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80
MANUAL	35/55	UNLTD



EXPLORER, MOUNTAINEER (4x2) (4x4)

FRONT TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.



CAUTION: It is recommended that the Explorer, Mountaineer (4x2) (4x4) be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure.

NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

NOTE: On a 4x2 vehicle, it is acceptable to tow the vehicle with the front wheels on the ground (without dollies) and the rear wheels off the ground.

NOTE: On a 4x4 vehicle, it is recommended that the vehicle be towed with a wheel lift or flatbed equipment with all the wheels off the ground.

If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

EXPLORER, MOUNTAINEER (4x2) (4x4)

REAR TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.



CAUTION: It is recommended that the Explorer, Mountaineer (4x2) (4x4) be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure.

NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

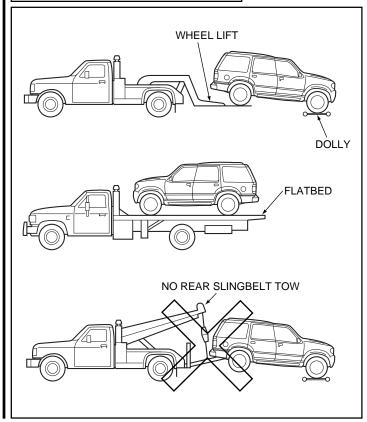
NOTE: On a 4x2 vehicle, it is acceptable to tow the vehicle with the front wheels on the ground (without dollies) and the rear wheels off the ground.

NOTE: On a 4x4 vehicle, it is recommended that the vehicle be towed with a wheel lift or flatbed equipment with all the wheels off the ground.

If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

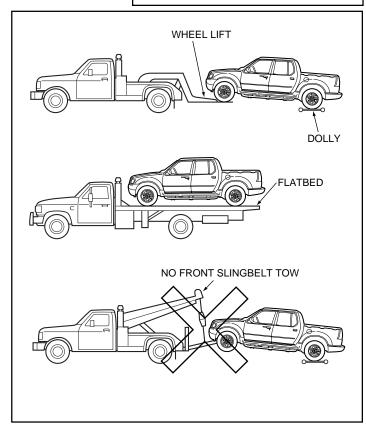
TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80
MANUAL	35/55	UNLTD







TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80
MANUAL	35/55	UNLTD



SPORT-TRAC (4x2) (4x4)

FRONT TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

CAUTION: If equipped with air suspension, the air suspension control must be turned to the OFF position.

CAUTION: It is recommended that the Sport-Trac (4x2) (4x4) be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure.

NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

NOTE: On a 4x2 vehicle, it is acceptable to tow the vehicle with the front wheels on the ground (without dollies) and the rear wheels off the ground.

NOTE: On a 4x4 vehicle, it is recommended that the vehicle be towed with a wheel lift or flatbed equipment with all the wheels off the ground.

SPORT-TRAC (4x2) (4x4)

REAR TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

CAUTION: If equipped with air suspension, the air suspension control must be turned to the OFF position.

CAUTION: It is recommended that the Sport-Trac (4x2) (4x4) be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure.

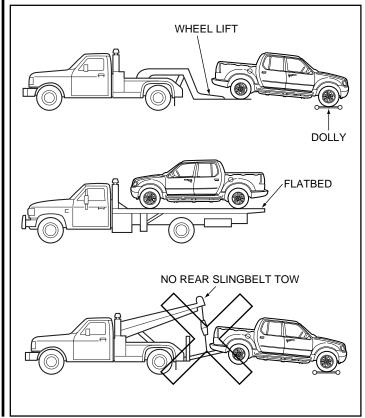
NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

NOTE: On a 4x2 vehicle, it is acceptable to tow the vehicle with the front wheels on the ground (without dollies) and the rear wheels off the ground.

NOTE: On a 4x4 vehicle, it is recommended that the vehicle be towed with a wheel lift or flatbed equipment with all the wheels off the ground.

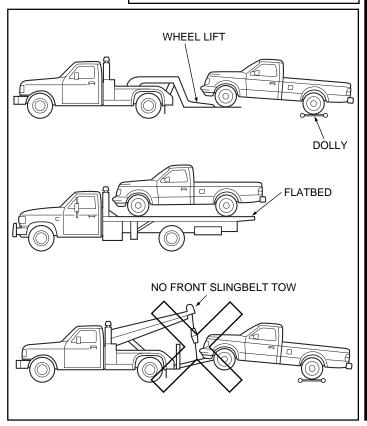
TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80
MANUAL	35/55	UNLTD







TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80
MANUAL	35/55	UNLTD



RANGER

FRONT TOWING CONNECTIONS

DO NOT TOW WITH SLINGBELT EQUIPMENT.

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.



CAUTION: It is recommended that the Ranger be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure.

NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

NOTE: On a 4x4 vehicle, it is recommended that the vehicle be towed with a wheel lift and dolly or flatbed equipment with all the wheels off the ground.

RANGER

REAR TOWING CONNECTIONS

DO NOT TOW WITH SLINGBELT EQUIPMENT

CAUTION: It is recommended that the Ranger be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure.

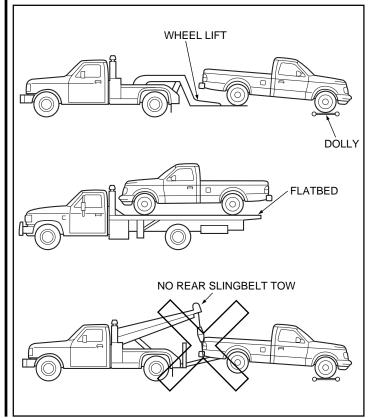
NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

On a 4x2 vehicle, it is acceptable to tow the vehicle with the front wheels on the ground and the rear wheels off the ground.

On a 4x4 vehicle, it is recommended that the vehicle be towed with a wheel lift and dolly or flatbed equipment with all the wheels off the ground.

TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80
MANUAL	35/55	UNLTD

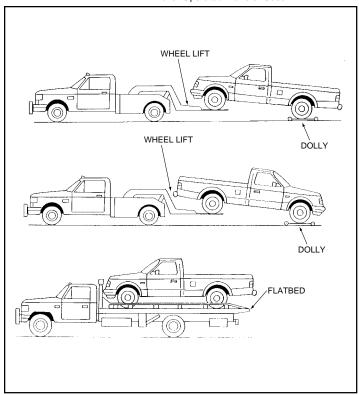






TRANS	MPH/KMH	MILES/KMS
*	35/55 55/90	50/80 UNLTD
**	35/55 55/90	50/80 UNLTD

*2WD & 4WD Electronic Shift Transfer Case **4WD Lever Operated Transfer Case



F-150, LIGHTNING, NASCAR SPECIAL EDITION, HARLEY-DAVIDSON, SUPERCREW, F-250, NAVIGATOR, EXPEDITION, BLACKWOOD

DO NOT TOW WITH SLINGBELT EQUIPMENT

CAUTION: It is recommended that the vehicle be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure.

CAUTION: If the vehicle is equipped with air suspension, the air suspension control must be turned to the OFF position. The control is located behind an access panel beneath the passenger side of the instrument panel.

NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

NOTE: Use of dollies is not required for towing of NASCAR Special Edition vehicles.

NOTE: If you are towing a NASCAR Special Edition F-150 using flatbed equipment you must place two 4x4 boards at the end of the ramp to allow for bumper clearance.

NOTE: On a 4x2 vehicle, it is acceptable to tow the vehicle with the front wheels on the ground (without dollies) and the rear wheels off the ground.

NOTE: On a 4x4 vehicle, it is recommended that the vehicle be towed with a wheel lift and dolly or flatbed equipment with all the wheels off the ground.

F-250, F-350, F-450, F-550 SUPER DUTY (4x2) (4x4)

FRONT TOWING CONNECTIONS

CAUTION: When towing F-Series vehicles, a 4x4 crossbeam should be used with 4x4 models, but should not be used with 4x2 models, to avoid potential damage to the lower radiator support and oil cooler lines.

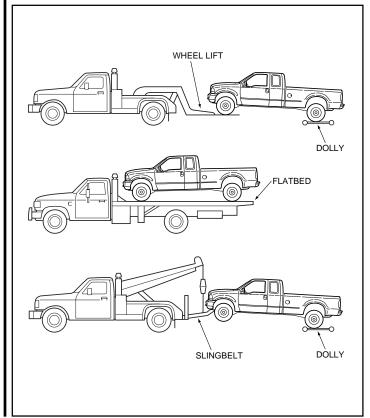
NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

- Insert T-hooks in T-hook slots in frame.
- Position 4x4 crossbeam under each leaf spring, supported at the tow chains and sling tow bar.
- · Attach safety chains around axle.

NOTE: Some F-450 and F-550 vehicles may include or be equipped with aftermarket equipment. These components could be damaged using a slingbelt or wheel lift. Refer to the body builders information for towing instructions.

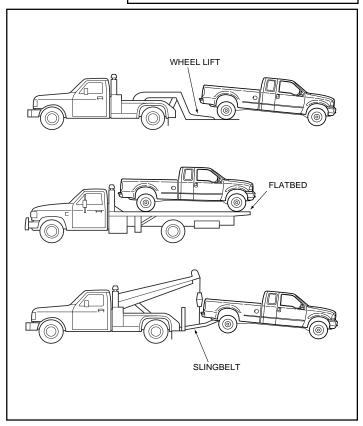
TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD
MANUAL	UNLTD	UNLTD







TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD
MANUAL	UNLTD	UNLTD



F-250, F-350, F-450, F-550 SUPER DUTY (4x2) (4x4)

REAR TOWING CONNECTIONS

NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

- Attach T-hooks in T-hook slots on frame rail.
- Locate the sling belt under the rear bumper.
- · Attach safety chain around rear axle.

NOTE: Some F-450 and F-550 vehicles may include or be equipped with aftermarket equipment. These components could be damaged using a slingbelt or wheel lift. Refer to the body builders information for towing instructions.

EXCURSION (4x2) (4x4)

FRONT TOWING CONNECTIONS

CAUTION: When towing the Excursion, a 4x4 crossbeam should be used with 4x4 models, but should not be used with 4x2 models, to avoid potential damage to the lower radiator support and oil cooler lines.

NOTE: It is recommended that the vehicle be towed with a wheel lift and dolly or flatbed equipment with all the wheels off the ground. However, a slingbelt with T-hooks and a dolly can be used.

NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

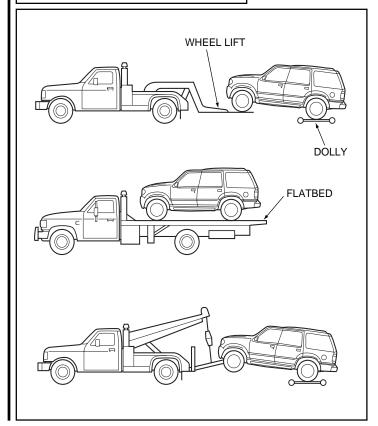
- Insert T-hooks in T-hook slots in blocker beam or front spring hanger brackets.
- · Attach safety chain around axle.

If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

NOTE: It is recommended that the vehicle be towed with a wheel lift and dolly or flatbed equipment with all the wheels off the ground.

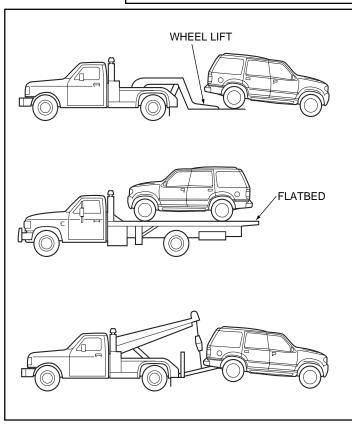
TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD







TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD



EXCURSION (4x2) (4x4)

REAR TOWING CONNECTIONS

NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

- Attach T-hooks in T-hook slots on frame rail or frame mounted trailer hitch.
- Locate the sling belt under the rear bumper or frame mounted trailer hitch.
- Attach safety chain around rear axle.

NOTE: On a 4x2 vehicle, it is acceptable to tow the vehicle with the front wheels on the ground and the rear wheels off the ground using a wheel lift or a slingbelt with T-hook.

NOTE: On a 4x4 vehicle, it is recommended that the vehicle be towed with a wheel lift or flatbed equipment with all the wheels off the ground. However, a slingbelt with T-hooks can be used.

ESCAPE

FRONT TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

CAUTION: It is recommended that the Escape be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

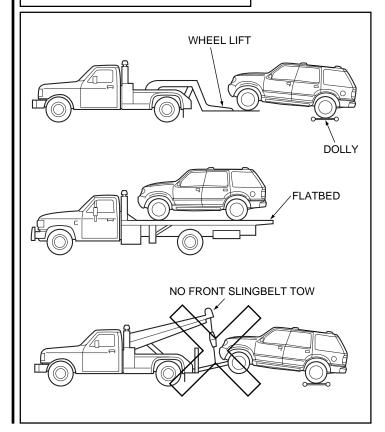
NOTE: On a 4x2 vehicle, it is acceptable to tow the vehicle with the rear wheels on the ground and the front wheels off the ground.

NOTE: On a 4x4 vehicle, it is recommended that the vehicle be towed with a wheel lift and dolly or flatbed equipment with all the wheels off the ground.

NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

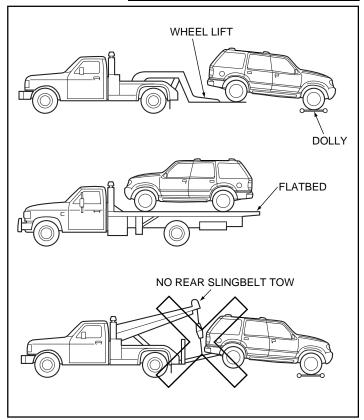
TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD
71010	ONLIB	0.12.12







TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD



REAR TOWING CONNECTIONS

CAUTION: Do not tow with J-hooks under any circumstances. J-hooks will damage driveline and suspension components.

CAUTION: If the Escape is to be towed from the rear using wheel lift equipment, the front wheels (drive wheels) must be placed on a dolly to prevent damage to the transaxle.

CAUTION: It is recommended that the Escape be towed with a wheel lift or flatbed equipment. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. If the vehicle is towed by other means or incorrectly, vehicle damage may occur.

NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

E-SERIES, CLUB WAGON, E-150, E-250, E-350, E-SPORT

FRONT TOWING CONNECTIONS — SLINGBELT

CAUTION: If the vehicle is equipped with an air dam and must be towed from the front, it is recommended that the vehicle be towed with a wheel lift or flatbed equipment to prevent damage to the air dam.

CAUTION: It is recommended that the E-Series vehicles be towed with a wheel lift or flatbed equipment. However, a slingbelt with T-hooks can also be used.

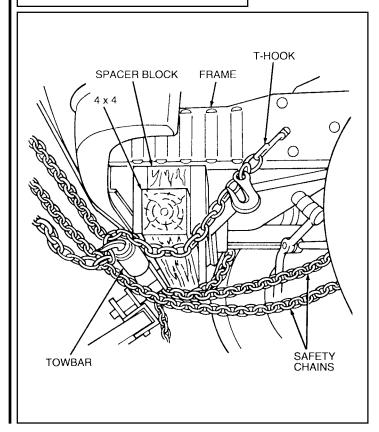
CAUTION: When towing E-Series vehicles, spacer blocks must be used with a 4x4 crossbeam.

NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

- Insert T-hooks in horizontal T-hook slots in frame.
- Place spacer blocks and 4x4 crossbeam behind bumper and air dam and across frame rails. Make sure that spacer blocks are under frame rails.
- Attach safety chains around axle, outboard of coil springs.

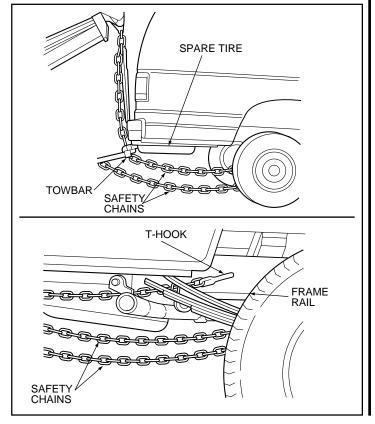
TRANS	MPH/KMH	MILES/KMS
AUTO	35/55	50/80







TRANS	MPH/KMH	MILES/KMS
AUTO	UNLTD	UNLTD



E-SERIES, CLUB WAGON, E-150, E-250, E-350, E-SPORT

REAR TOWING CONNECTIONS

CAUTION: It is recommended that E-Series vehicles be towed with a wheel lift or flatbed equipment. However, a slingbelt with T-hooks can also be used.

NOTE: Refer to general towing information on pages 26 through 29 before towing vehicle.

- Attach T-hooks in T-hook slots on frame rail, inside the leaf spring.
- Route chains below spring shackles, on the right side route chain above tail pipe.
- Place towbar under rear bumper, missing spare tire.
- Attach safety chain around rear axle. Route chain between axle and parking brake cable on RH side.

2002 FORD SERVICE INFORMATION

With our 2002 Service Information, you can repair Ford, Lincoln and Mercury Cars and Light Trucks in an expert manner and ensure customer satisfaction. The low cost of this information is an investment in the growth of your business.

WORKSHOP MANUALS

Now available on CD-ROM, Workshop Manuals provide complete maintenance and repair procedures. Both Car and Truck Workshop Manuals cover Body, Chassis, Electrical, Powertrain, Pre-Delivery and Emissions. A "must" to do the job right the first time.

WIRING DIAGRAMS

Provides schematics of all electrical components and identifies each wire to its proper function.

PUBLICATIONS ORDERING INFORMATION

To obtain information about ordering additional copies of this publication or to order any other Ford or Lincoln/Mercury publication write to: Ford Publications, care of Helm Inc., P.O. Box 07150, Detroit, MI 48207.