

BEECHJET 400A

TOWING AND TAXIING

DESCRIPTION AND OPERATION

Towing involves ground movement of the airplane without engine operation and is the preferred method of airplane positioning since it provides more safety and control than taxiing. The airplane may be towed by hand or by a powered tug. The airplane is normally towed at the nose wheel, but main gear towing may be necessary if the airplane *is off* the pavement in rough, muddy or snow-covered ground. Nose wheel steering must be done by use of the tow bar during main gear towing.

SPECIAL TOOLS AND EQUIPMENT

Each tool listed in Chart 1 is provided as an example of the equipment designed to perform a specific function. Generic or locally manufactured tools that are the equivalent with respect to accuracy, function and craftsmanship may be used in lieu of those listed.

CHART 1
SPECIAL TOOLS AND EQUIPMENT

TOOL NAME	PART NO.	SUPPLIER	USE
1. Tow Bar	45A91715-1	Raytheon Aircraft Co. P.O. Box 85 Wichita, KS 67206	Tow airplane at nose gear.
	01-1179-0000 (Portable tow bar)	Tronair Aircraft Ground Equipment 1740 Eber Road, Holland, OH 43528	
	01-1202-0000 multi-head tow bar with a 01-0543-0000 tow bar head	Tronair Aircraft Ground Equipment 1740 Eber Road Holland, OH 43528	
2. Towing Adapter Belt Assembly	45A99601-1	Raytheon Aircraft Co. P.O. Box 85 Wichita, KS 67206	Tow airplane at main gear.
3. Tow Cables (20,000 pound tensile strength - 2 each)		Obtain locally	Tow airplane at main gear.
4. Tow Vehicle		Obtain locally	Tow airplane.

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NOSE GEAR TOWING PROCEDURE

Figures 201 and 202

- a. Refer to Figure 202, Detail A and disconnect the torque link from the nose gear shock strut by pulling the upper pin.
- b. Attach the tow bar (1, Chart 1, 9-00-00) to the nose wheel axle.
- c. Assign an authorized ground crew member to operate airplane brakes as required.
- d. Station an observer at each wing tip when towing the airplane near buildings or other airplane.
- e. Remove all wheel chocks.
- f. Release the parking brake by pushing in on the parking brake handle.

CAUTION

Never push, pull or lift airplane by elevators, flaps or other control surfaces.

Avoid sudden starts or stops during towing operations.

Ensure that all airplane shock struts and tires are at normal pressure before towing.

Never drag the landing gear tires by towing the airplane at a sharp angle.

Always follow the largest possible turning radius that is compatible with available space.
Refer to Figure 201.

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Failure to observe these precautions could result in structural damage to the airplane.

- g. Tow the airplane by hand or by tow vehicle (4, Chart 1, 9-00-00).

NOTE

Always attempt to center the nose wheel before bringing the airplane to a full stop. This will reduce stress on the nose landing gear the next time the airplane is moved.

CAUTION

Do not set the parking brake when the ambient temperature is at or below 32° F, as any moisture within the brake assembly will freeze and prevent brake release.

If the engines are running, the parking brake **MUST** be set from the pilot's side as specified in the following step. If the engines are not running, the parking brake **MUST** be set from the pilot's side of the cockpit by pulling out the parking brake handle and then depressing the toe brakes two or three times.

- h. After positioning the airplane, set the parking brake by depressing and holding both toe brakes, pulling out on the parking brake handle, then releasing both toe brakes.
- i. Chock all wheels securely.
- J. Ground the airplane at wing and fuselage ground points.
- k. Remove the tow bar from the airplane.
- l. Replace the pin that connects the torque link to the nose landing gear shock strut assembly.

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MAIN GEAR TOWING PROCEDURES

Figures 202 and 203

CAUTION

Each towing adapter belt assembly must be attached to the main gear as shown. Refer to Figure 203. Attachment at a location other than that shown can result in damage to the landing gear.

- a. Install a towing adapter belt assembly (2, Chart 1, 9-00-00) on each main landing gear shock strut outer tube between the gear door bracket and the torque link.

CAUTION

Do not wrap the tow cables around the main landing gear, as the gear can be damaged if the towing adapter belt assembly is not used.

- b. Connect the tow cables (3, Chart 1, 9-00-00) to the towing adapter belt assemblies and the towing vehicle (4, Chart 1, 9-00-00). Ensure that the cables are of sufficient length to clear the airplane.
- c. Refer to Figure 202, Detail A and disconnect the torque link from the nose gear shock strut by removing the upper pin.
- d. Attach a tow bar (1, Chart 1, 9-00-00) to the nose wheel axle for manual steering from a position ahead of the nose of the airplane.
- e. Assign an authorized ground crew member to operate airplane brakes as required.
- f. Assign an authorized ground crew member to steer the nose wheel by using the tow bar.

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- g. Station an observer at each wing tip when towing the airplane near buildings or other airplane.
- h. Ensure that all wheel chocks have been removed.
- i. Release the parking brake by pushing in on the parking brake handle.

CAUTION

Never push, pull or lift airplane by elevators, flaps or other control surfaces.

Avoid sudden starts or stops during towing operations.

Ensure that all airplane shock struts and tires are at normal pressure before towing.

Never drag the landing gear tires by towing the airplane at a sharp angle. Always follow the largest possible turning radius that is compatible with available space.

Failure to observe these precautions could result in structural damage to the airplane.

- j. Tow the airplane.

NOTE

Always attempt to center the nose wheel before bringing the airplane to a full stop. This will reduce stress on the nose landing gear the next time the airplane is moved.

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CAUTION

Do not set the parking brake when the ambient temperature is at or below 32° F, as any moisture within the brake assembly will freeze and prevent brake release.

If the engines are running, the parking brake **MUST** be set from the pilot's side as specified in the following step. If the engines are not running, the parking brake **MUST** be set from the pilot's side of the cockpit by pulling out the parking brake handle and then depressing the toe brakes two or three times.

k. After positioning the airplane, set the parking brake by depressing and holding both toe brakes, pulling out on the parking brake handle, then releasing both toe brakes.

NOTE

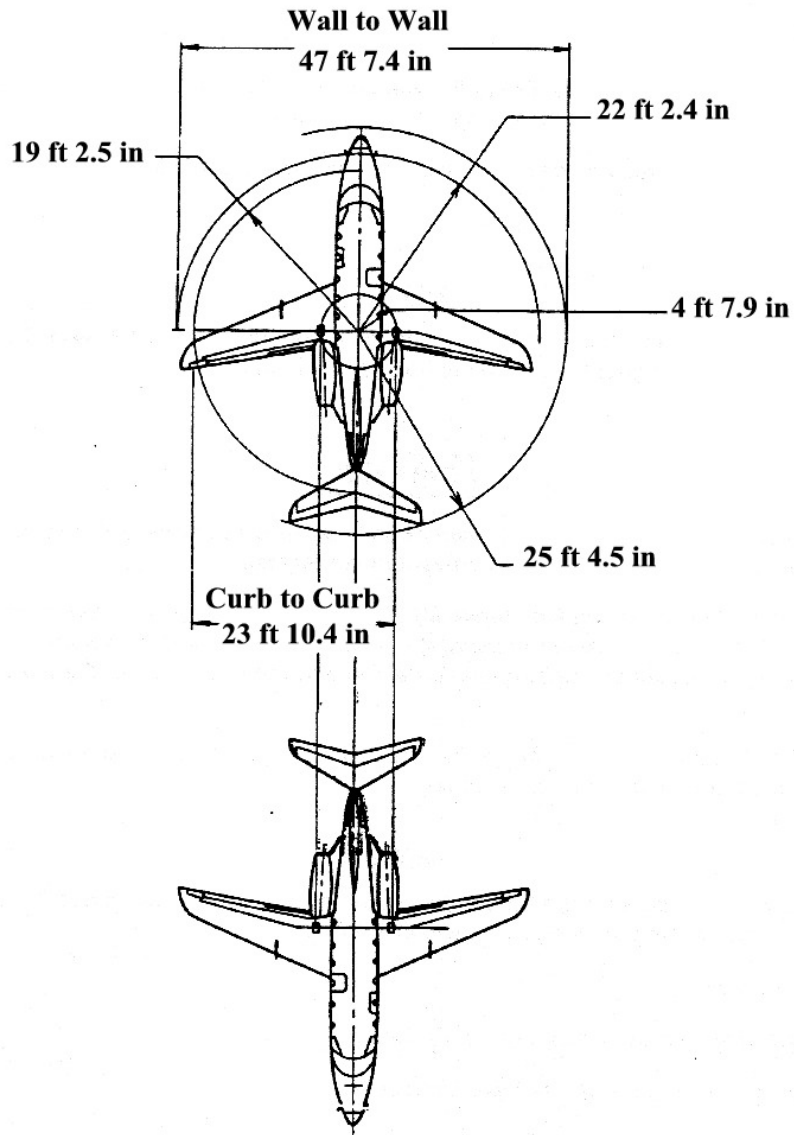
The parking brake must be set from the pilot's side of the cockpit by pulling out the parking brake handle and then depressing the toe brakes two or three times.

l. Chock all wheels securely.

m. Ground the airplane at wing and fuselage ground points.

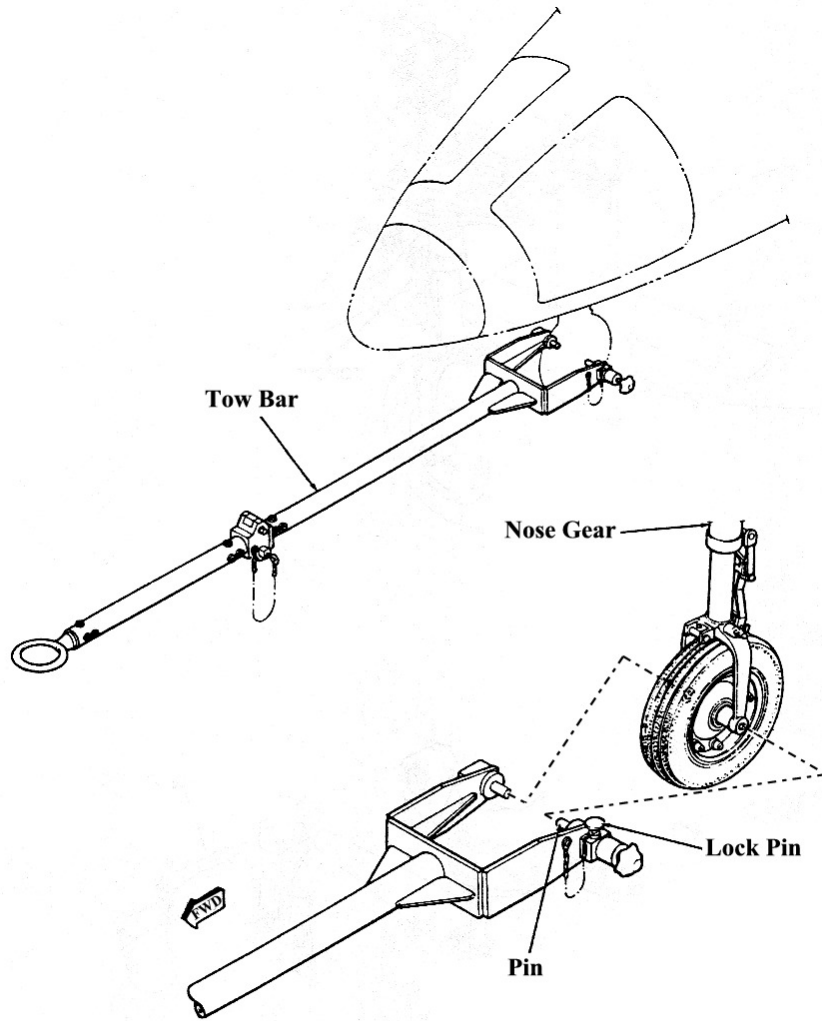
n. Disconnect the tow cables and remove the towing adapters.

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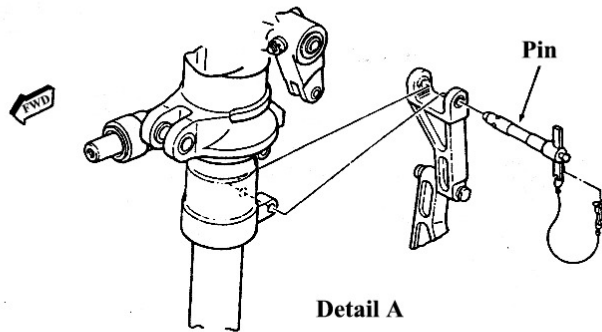
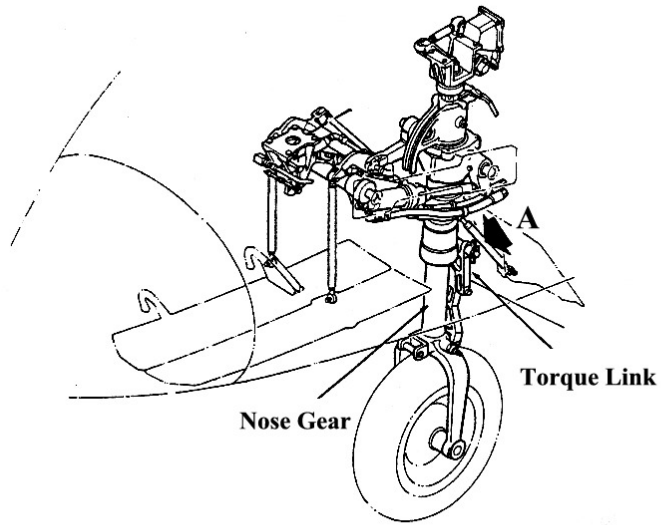
Turning Radius (tow bar)
Figure 201

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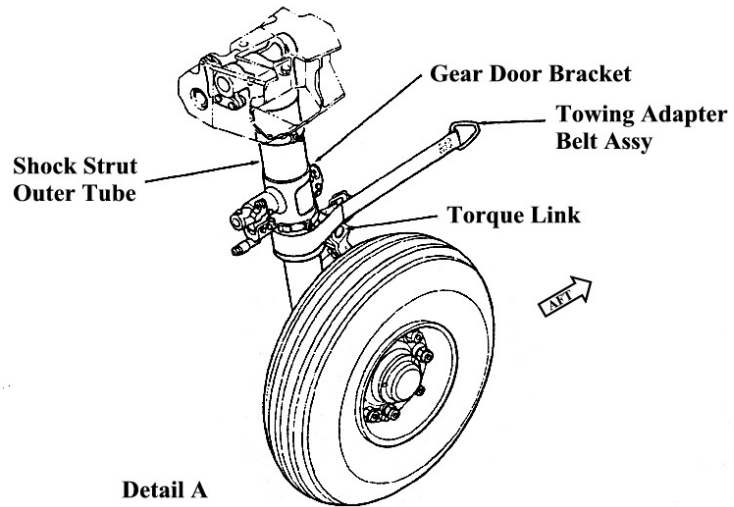
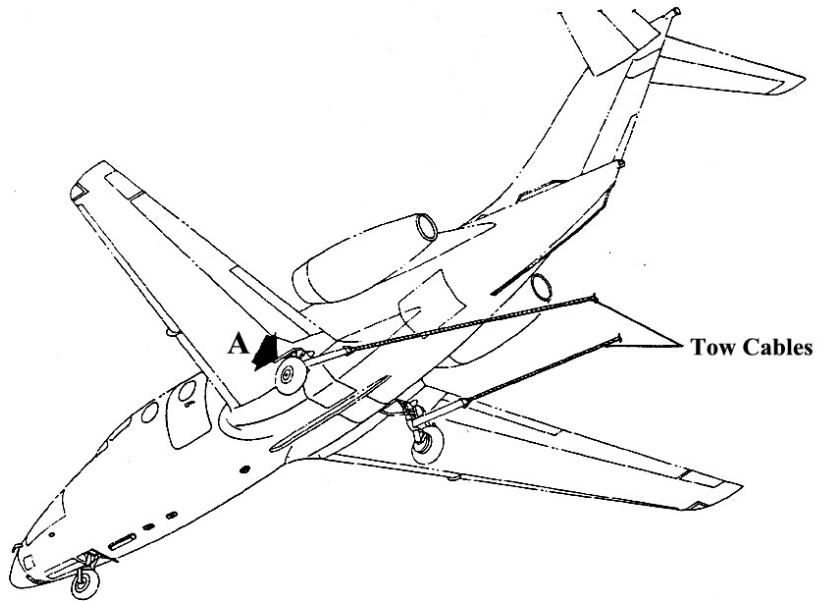
**Nose Gear Towing
(sheet 1 of 2)
Figure 202**

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**Nose Gear Towing
Sheet 2 of 2
Figure 202**

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Detail A

**Main Gear Towing
Figure 203**