



## TY-EMB1 TOW BAR HEAD

USE ON: ERJ, 135, 140, 145, LEGACY 600, 650

GTOW: N/A

LENGTH:

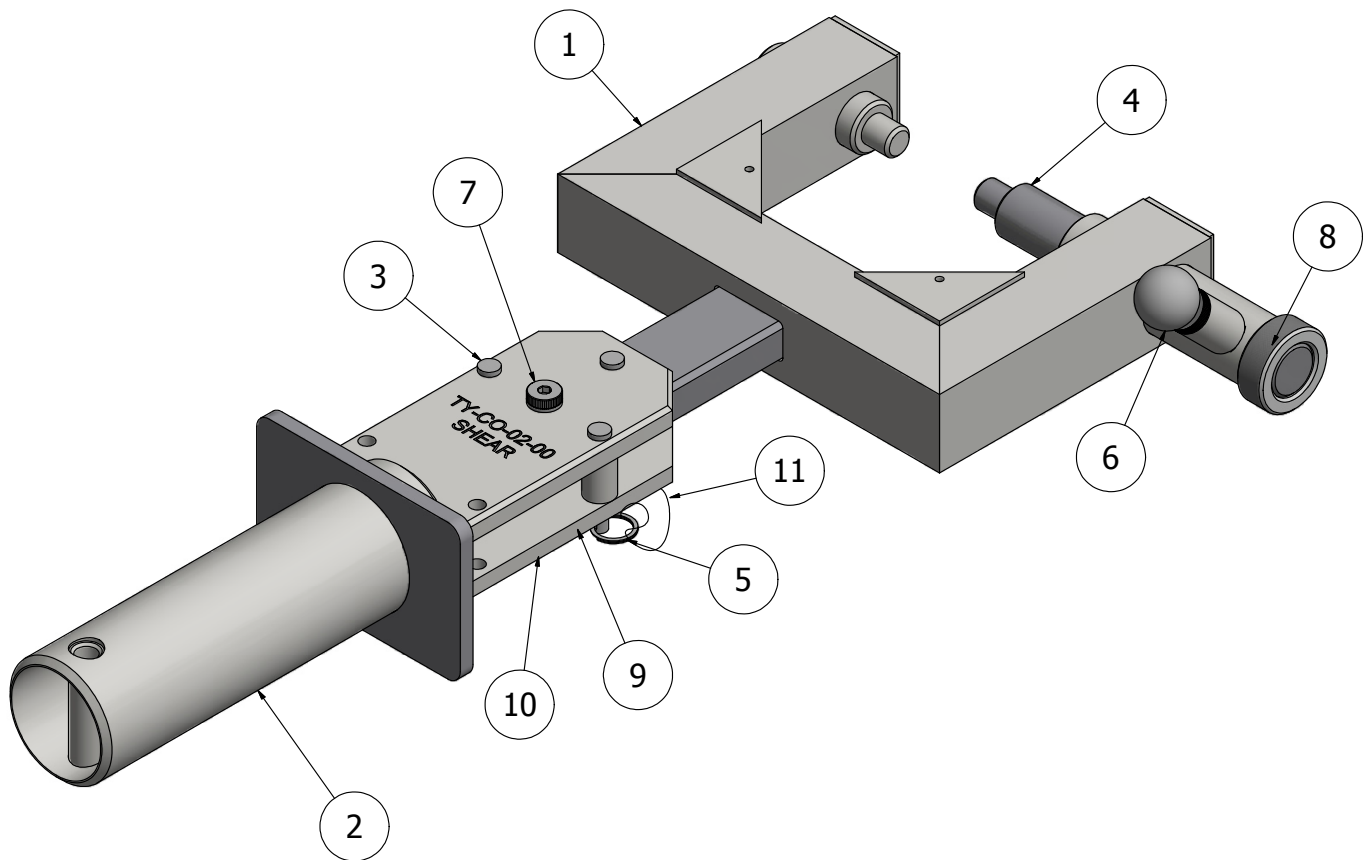
COLOR: YELLOW

SHIPPING: 26" X 18" X 6" @ 37 LBS.

HEAD WEIGHT: 21 LBS.

SHEAR WEIGHT: 16 LBS.

REPLACEMENT SHEAR PIN: TY-SP9000



### PARTS LIST

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	TY-EM-01-00	FRAME ASM.
2	1	TY-CO-02-00	SHEAR
3	3	TY-SP-9000	SHEAR PIN
4	1	TY-EM-02-00	SLIDING PIN ASM.
5	3	90177A218	1" O.D. 13/16" I.D. SPLIT RING
6	1	90222A112	LOCKING PIN ASSEMBLY
7	1	91259A720	1/2 X 2 SHCS SHOULDER BOLT 3/8-16 THREAD
8	1	92620A537	1/4-20 X 1/2 BOLT
9	1	90126A031	3/8" SAE WASHER
10	1	90630A121	LOCKNUT 3/8-16
11	1	TY-CO-04	LANYARD



# OPERATION & MAINTENANCE

## TY-EMB1



### PRE-INSTALL CHECKLIST

- Check Frame (1) for straightness – visual inspection.
- Check Pin Assembly (4) for cracks & slides easily, and Locking Pin Assembly (6) locks in Pin (4) in close position; push in.
- Check all welds for distortion & cracks. If found do not use – call BRACKETT for repairs.
- Check center Shear Pin on the Shear Assembly (TY-CO-02-00) by pushing Towhead side-to-side – no movement is good. Pins to left and right of bolt is extra Shear Pin storage.

### MAINTENANCE

- Very little maintenance is needed.
- Oil item (4) Pin assembly as needed for smooth in & out movement with 30 WT oil.
- Oil item (6) by pulling & holding the knob out and oil shaft.

### OPERATION

- Now install Towhead on the TY-75 Towbar or on the TY-125 with a reducer.
- Pull Locking Pin (6), slide out Pin Assembly (4). Now it is ready for installation on Nose Wheel.
- Detach Towbar from Tug and roll up to Nose Gear. Using 2 people, one on each side of the Towhead, lift with one hand and push the Pin (4) into wheel axle until spring lock is heard.
- Re-attach Tug and move safely.

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## BRACKETT AIRCRAFT CO., INC.

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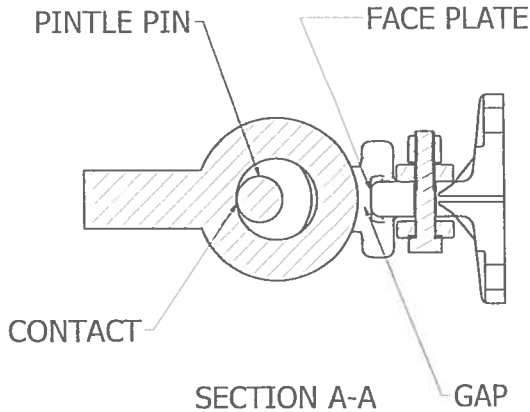


**EYEBOLT AND PINTLE PIN SIZE:**

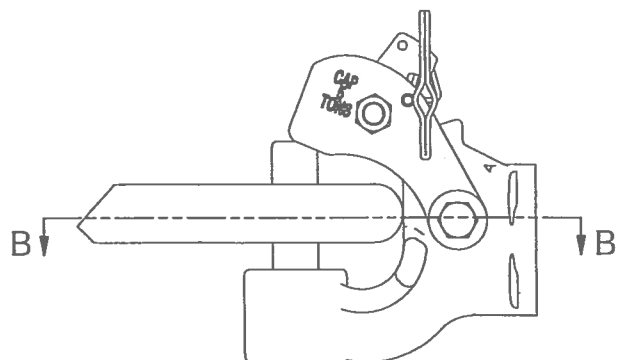
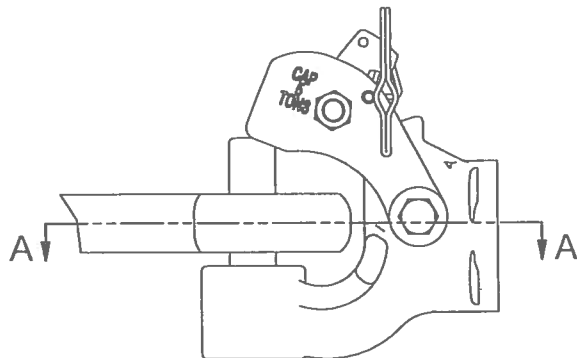
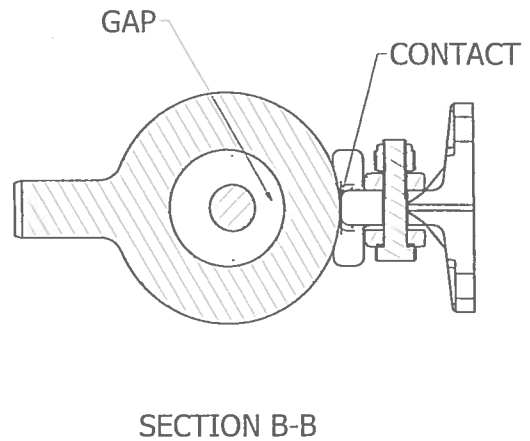
Damage to the tow bar or aircraft can result by towing or pushing an aircraft with an incorrect size eyebolt or pintle pin. A correct size eyebolt will make contact with the pintle pin. A gap between the eyebolt outside diameter and the coupler face plate should be easily seen. An eyebolt that is too large will cause the eyebolt to make contact with the face plate of the coupler. When the eyebolt is too large for the coupler, a gap between the inside diameter of the eyebolt and the pintle pin plate will be seen. (Detail B-B).

To ensure proper towing and pushing, check that the pintle pin diameter is not too large for the eyebolt's inside diameter. Approximately a one-half inch (1/2") gap between the pin diameter and the eyebolt I.D. should be seen. If any of these conditions are not met, please contact Brackett Aircraft for information to obtain a new coupler.

**CORRECT**



**INCORRECT**



# ***ROBERT'S RULES FOR TOWING***

## **1. INSPECTION**

Prior to hooking up the Towbar to the tug, make a quick visual inspection of the Towbar. Check for a bent or damaged frame and for worn or missing parts. Check tire pressure. Check that you have the proper head installed. DO NOT attempt to tow any aircraft with a damaged or improper Towbar.

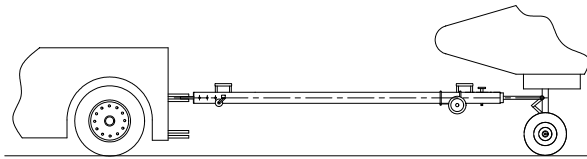
## **2. RESPONSIBILITY**

Operator of the tug must understand that it is his/her responsibility to move the aircraft safely from "Point A" to "Point B". NO HOT RODDERS.

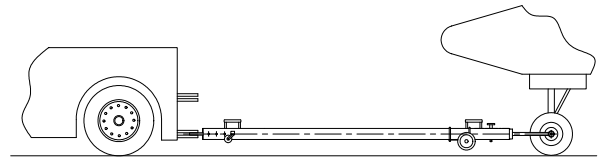
## **3. HOOK UP**

When hooking the Towbar to the tug, three things are necessary:

1. The proper tug and Towbar for the size aircraft being moved.
2. The Towbar must be approximately level between the aircraft and the tug.
3. The hitch on the Towbar must move freely on the hitch mounted on the tug.



CORRECT



CORRECT

## ***BASIC TOWING RULES***

1. Prior to moving, make sure that full swivel release pins are released (if applicable). Also, double check that all the tie downs and chocks are removed, and aircraft brakes are released.
2. TOW SLOW, max speed, a brisk walk.
3. NOSE WHEEL TOWING LIMITS: Do not exceed towing limits. If not marked or not known, do not exceed 30° from center. Be extra cautious on snow and ice.
4. To prevent hangar rash when squeezing the birds together an extra set of eyes helps.
5. Push at a creep to minimize chance of jack-knife" Think Safety" and use common sense.

**NOTE:** Thousand of dollars in damage can occur in a few seconds while towing. It is estimated that 90% of towing damage is due to operator negligence. We all know when it's raining or -10° below zero and you're on an open tug it's tough to go at a walking speed.

**Thanks for reading the rules.  
Roy Brackett, Brackett Aircraft Co., Inc.**