

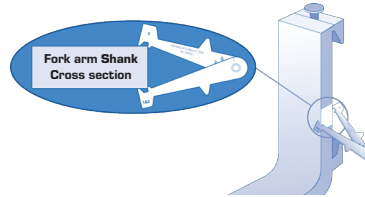
ARE YOUR FORKS SAFE?

OSHA as well as liability concerns demands scheduled fork inspections.

What is required?

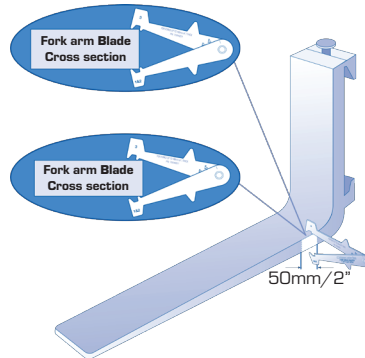
ANSI/ITSDF B56.1 and B56.6 Safety Standards require:

1. Inspection at least every 12 months or whenever permanent deformation is suspected. Severe usage applications require more frequent inspection.
2. Inspection records to be kept.
3. Inspection to be performed by trained personnel
4. Inspect for:
 - Surface Cracks - If found remove from service. The collar on shaft-mounted forks should be carefully checked for cracks or deformation.
 - If Straightness of blade or shank is found in excess of 0.5% of blade length or shank height remove from service.
 - If Fork angle from upper face of blade to load face of shank is in excess 93 degrees or more than 3 degrees of original specification remove from service.
 - If blade tips are more than 3% blade length difference in relative height remove from service.
 - If wear, especially in heel area, is in excess of 10% remove from service. Note: 10% wear reduces fork lift capacity by 20%
 - If deformation or excessive wear is found in hooks or in collars on shaft-mounted forks remove from service.
 - Defective Locking pins (if so equipped) – if found Promptly replace
 - Capacity and other markings on side of forks must be visible
5. Only the fork manufacturer or someone of equal competence may determine if a fork is repairable. Surface cracks and wear are not repairable. Unrepairable forks must be cut in half at the heel area.
6. If forks are straightened they must be heat-treated and load tested in accordance with the ANSI/ITSDF standard.



STEP 1 SET CALIPERS

Set the front teeth of the jaws by measuring the thickness of the shank. Ensure that the caliper is held square across the shank for an accurate reading.



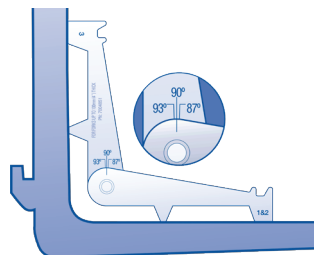
STEP 2 CHECK BLADE THICKNESS

Position the jaws of the caliper over the flanks of the fork arm blade. If inside teeth of caliper hit fork, it has less than 10% wear and can remain in service.

Replace If Necessary

If the caliper does pass over freely, the fork arm must be taken out of service. This represents 10% wear and 20% reduction in capacity.

Note: Standard calipers can be used on forks up to and including 100mm, (4") thick. They are **NOT TO BE USED ON FULL OR LUMBER TAPERED FORKS** where the upright thickness is greater than that of the blade. In these cases 10% reduction must be obtained by measurement. You will need to know the original fork blade thickness.

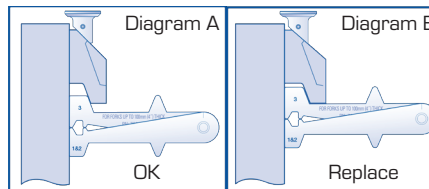


STEP 3 CHECK FORK HEEL ANGLE

- A. Open the calipers to approximately 90° and place the calipers in the top inside heel area of the fork (on top of the blade).
- B. Ensure that the 2 lower pieces of the horizontal leg are both touching the top of the blade.

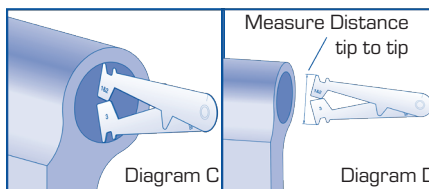
- C. Move the calipers towards the upright. Ensure that the caliper arms are both parallel to the blade and to the upright.
- D. Open/close the calipers so that the two similar extruding pieces on the vertical leg of the calipers both touch the upright/shank of the fork.
- E. When you are sure that all 4 points are simultaneously in contact with the fork, gently remove the calipers and look at the indicator line found at the top of the hinge pin.

Note: If the line on the horizontal leg (that points vertically) is found to lie beyond either the 93° or 87° indicator line, the fork should be marked to be checked for either permanent deformation, possible stress cracks or any other defect that could impede the safe use of the fork. Note: Some forks are manufactured purposely to angles greater or less than 90°.



STEP 4 CHECKING FORK HOOKS

Use the end of the caliper designed for your fork class. If the fork caliper slides entirely into the hook pocket (Diagram B) the fork must be removed from service.



STEP 5 MEASURING THE BORE ON SHAFT/PIN TYPE FORKS

Insert the reversed caliper inside the eye of the tube (see Diagram C) opening the teeth until both sides of the teeth come in contact with the inside wall of the tube. Pull the caliper out and measure the distance from tip to tip (see Diagram D).