



REPLACEMENT OF BLADE ASSEMBLY

- 1) TO REMOVE THE ENTIRE BLADE ASSEMBLY, FIRST REMOVE THE TWO (2) 3/8" DIAMETER LOCKNUTS FROM THE TOP OF THE SHAFT WHERE IT ATTACHES TO THE X-BRACE. REMOVE THE TWO (2) BOLTS FROM THE BOTTOM OF THE X-BRACE AND THE BLADE ASSEMBLY CAN NOW BE REMOVED EASILY.
- 2) BEFORE ATTACHING THE NEW BLADE ASSEMBLY, PLACE BELT ON ALUMINUM HUB. NEXT ATTACH THE BLADE ASSEMBLY TO THE X-BRACE MAKING CERTAIN THAT IT IS CENTERED IN THE ORIFICE, LEFT TO RIGHT AND TOP TO BOTTOM. TIGHTEN THE SHAFT MOUNTING HARDWARE SECURELY.

REPLACEMENT OF INDIVIDUAL FAN BLADES

- 1) IT IS NOT NECESSARY TO REMOVE COMPLETE BLADE ASSEMBLY FROM THE FAN UNIT TO REPLACE INDIVIDUAL FAN BLADES.
- 2) REPLACEMENT FAN BLADES COME IN CLOSELY MATCHED PAIRS. FOR BLADE ASSEMBLY TO REMAIN IN BALANCE, THE BLADE DIRECTLY OPPOSITE THE ONE BEING REPLACED WILL ALSO HAVE TO BE REPLACED.
- 3) REMOVE THE TWO (2) HEX NUTS AND TWO (2) LOCK WASHERS FROM THE BACK OF THE DISC. ON THE CBL 42, THERE ARE NO LOCK WASHERS ON THE BACK OF THE DISC; AN ELASTIC INSERT LOCKNUT IS USED INSTEAD. HOLDING THE BLADE, PUSH THE TWO (2) BOLTS BACK THROUGH THE DISC AND BLADE AND THEN REMOVE THE BLADE.
- 4) NOTE: THERE ARE TWO (2) FIBER WASHERS, ONE FOR EACH BOLT, BETWEEN THE FAN BLADE AND THE FRONT OF THE DISC. THESE MUST BE PUT BACK IN PLACE AT RE-ASSEMBLY.
- 5) DURING RE-ASSEMBLY, IT IS VERY IMPORTANT THAT THE METAL FLAT WASHER BE INSTALLED WITH THE SHARP (BURRED) EDGE FACING AWAY FROM THE BLADE. DO THIS FOR ALL THE FLAT WASHERS THAT ARE REMOVED.
- 6) PUT THE BOLTS THROUGH THE FLAT WASHER, THE BLADE, AND THE DISC. ATTACH THE LOCK LOCK WASHER AND HEX NUTS TO THE REAR SIDE OF THE DISC AND TIGHTEN. NOTE: THE CBL 42 DOES NOT HAVE A LOCKWASHER.
- 7) REPEAT THE ABOVE PROCEDURE FOR ALL BLADES BEING REPLACED. AFTER THE REQUIRED BLADES HAVE BEEN REPLACED, IT WILL BE NECESSARY TO TRACK THE ENTIRE BLADE ASSEMBLY.

BLADE TRACKING & BLADE PITCHING PROCEDURE

- 1) TWO (2) "POINTERS" WILL BE REQUIRED—PREFERABLY A METAL ROD SIMILAR TO THE SHAPE OF A SHARPENED PENCIL OR A BAR GROUND TO A POINT ON ONE END.
- 2) PLACE POINTER PERPENDICULAR TO A LINE EVEN WITH THE BACK OF THE DISC 'B' INCHES FORWARD AT THE TIP OF THE BLADE AND SECURE IT. A SUGGESTED METHOD IS TO FASTEN POINTER TO UPRIGHT. SEE VIEW A.
- 3) IF BLADE IS OUT OF TRACK, BEND BLADE TOWARDS POINTER UNTIL BLADE TIP TOUCHES TIP OF POINTER. SEE VIEW B. TRACK ALL SIX BLADES IN THIS MANNER.
- 4) AFTER BLADES HAVE BEEN TRACKED, PLACE FRONT POINTER INTO POSITION 'A' INCHES ACROSS FROM REAR POINTER WITH POINTS FACING. IF BLADE WILL NOT PASS THROUGH THE TWO POINTERS, TWIST BLADE UNTIL BLADE WILL PASS THROUGH THE POINTERS TOUCHING BOTH VERY LIGHTLY. SEE VIEW C. WHEN THIS IS DONE IT SETS THE PROPER BLADE PITCH.

NO.	REVISION	BY	DATE
MATERIAL			
DO NOT SCALE THIS DRAWING			



DESCRIPTION
 INSTRUCTIONS FOR REPLACEMENT OF
 BLADES / BLADE ASSEMBLY
 CBL/NBF 24-48 / NCF 36&48

DR. MEL	CK. _____	APP'D. _____
SCALE NTS	DWG. NO. 401-174	
DATE 10-25-88	SHEET 1 OF 1	