

Rockwell custom kit

No. CK-AG-8

International

P.O. BOX 3090 ALBANY, GEORGIA 31706-3090 PHONE 229/883-1440 FAX 229/439-9790

Custom Kit CK-AG-8
August 13, 1975

CLEVELAND DISC BRAKES

MODELS AFFECTED: Model S-2R, Serial No's 1939R thru 2173R and 5001R thru 5026R equipped with 8.50-10 wheel assemblies and automotive fluid system.

REASON FOR PUBLICATION: To provide Cleveland Disc Brakes for Model S-2R Thrush Commander.

COMPLIANCE: At owner's discretion

NOTE

If any problems are encountered while installing this Custom Kit, contact Rockwell International, General Aviation Division, Customer Service Department, Bethany, Oklahoma 73008

BY WHOM WORK WILL BE ACCOMPLISHED:

A & P Mechanic or Equivalent

APPROVAL:

FAA DER Approved

ESTIMATED MAN HOURS:

Twelve (12) hours

PARTS DATA:

Parts required to install this Custom Kit may be purchased through your nearest Thrush Commander Distributor. Reference this Custom Kit, aircraft model and factory serial number when ordering Custom Kit No. CK-AG-8 consisting of the following:

<u>Qty</u>	<u>Part No.</u>	<u>Description</u>
2 ea.	25800-1	Master Cylinder Kit
	CONSISTING OF:	
	1 24603-3	Spring Guide
	1 25801-1	Piston Guide
	1 25801-2	Piston
	1 25082-1	Spring
	1 MS28775-111	O-Ring
	2 MS28775-210	O-Ring
2 ea.	Model 4500A2	Parking Brake Valve
2 ea.	90171-0304	Tube Assy.

7. Remove and discard existing parking brake valve.
8. Remove and discard existing hose assemblies and tube assemblies directly above brake assembly.

NOTE

Retain existing unions for later reinstallation.

9. Remove existing left and right brake master cylinder from airplane.
10. Disassemble existing brake master cylinders and discard the existing primary sealing cup, secondary seal, grommet, piston assembly and spring base (see Figure 1, Detail A).
11. Disassemble diaphragm assembly and discard diaphragm and retainer.

NOTE

Care should be taken so as not to damage diaphragm housing.

12. Flush out existing cylinder housing and reservoir with Methyl Ethyl Ketone (MEK) and blow dry with shop air.
13. Reassemble brake master cylinders (see Figure 1. Detail A), as follows:
 - a. Lubricate all components of master cylinder and 25800-1 kit with MIL-H-5606 red oil.
 - b. Install diaphragm housing on spring and insert in cylinder housing.
 - c. Install 25800-1 master cylinder kit in cylinder housing.

NOTE

Use caution so as not to destroy O-rings when installing kit.
Since O-rings must pass over hole in cylinder housing (between cylinder and reservoir) a piece of feeler gage material (approx. 0.01 inch thick) may be used to protect O-rings during installation.

- d. Install existing washer, retainer spring and boot.
14. Flush out existing steel brake lines, located inside fuselage, with Methyl Ethyl Ketone (MEK) and blow dry with shop air.
15. Install Model 4500A2 parking brake valve on reworked brake master cylinders (see Figure 1, Sheet 1 of 3).
16. Reinstall master brake cylinders in airplane (see Figure 1, Sheet 1 of 3).

17. Reconnect existing elbow and steel brake line to parking brake valve (see Figure 1, Sheet 1 of 3).
18. Install existing tube and tire on 40-129 wheel assembly. Torque wheel half bolts to 90 inch-pounds (see Figure 1, Detail B).
19. Inflate tires to 45 psi minimum, 70 psi maximum.
20. Inspect wheel bearing as received from manufacturer for proper lubrication. If inspection reveals an absence of grease or contamination, remove all grease provided by manufacturer by wiping bearings and race clean and repack bearing with MIL-G-81322B grease.
21. Install 214-01400 bearing, 153-01600 seal ring (2 places), 154-01600 felt ring and 155-00100 snap ring in inner wheel half (see Figure 1, Detail B).
22. Install 40-129 wheel assembly, 214-01000 bearing, MS21258C16 washer and AN7502-16 nut and tighten as follows:
 - a. While rotating wheel, torque nut to 80 inch-pounds.
 - b. While rotating wheel, back nut off to zero (0) inch-pounds.
 - c. While rotating wheel, finger tighten nut not to exceed 40 inch-pounds.
 - d. If nut is not in locking position, advance nut to next position (not to exceed 30° and/or 40 inch-pounds) while wheel is rotating.
 - e. Install MS24665-306 cotter pin.
23. Install 158-00800 hub cap and 155-00600 snap ring (see Figure 1, Detail B).
24. Remove four (4) backplate assemblies from brake cylinder assembly (see Figure 1, Detail B).
25. Install brake cylinder assembly on brake torque plate assembly and reinstall backplate assemblies on cylinder assembly. Torque bolts to 60 inch-pounds (see Figure 1, Detail B).
26. Install MS28741-4-0182 hose assembly, 90171-0304 tube assembly, MS28741-4-0100 hose assembly, AN815-4 union (2 places) and S-0310-012R O-ring (see Figure 1, Detail B).
27. Fill brake master cylinders with MIL-H-5606 red oil.
28. Remove any air in brake lines by successive pumping of brake pedal while bleeding system at bleeder valve located on bottom of brake assembly.
29. Remove airplane from jacks.
30. Check brake fluid to assure reservoir is full.

ELECTRICAL LOAD: No Change

WEIGHT AND BALANCE: The weight and balance change resulting from installation of this Custom Kit is as follows:

WEIGHT (LBS)	H-ARM (INCHES)	H-MOMENT (IN-LBS)
+1.0	3.1	+3.1

PUBLICATION AFFECTED: None

AIRCRAFT RECORDS: Make appropriate entry in airplane maintenance records as follows:
Custom Kit No. CK-AG-8 dated August 13, 1975, entitled
"Cleveland Disc Brake Installation", accomplished (date).

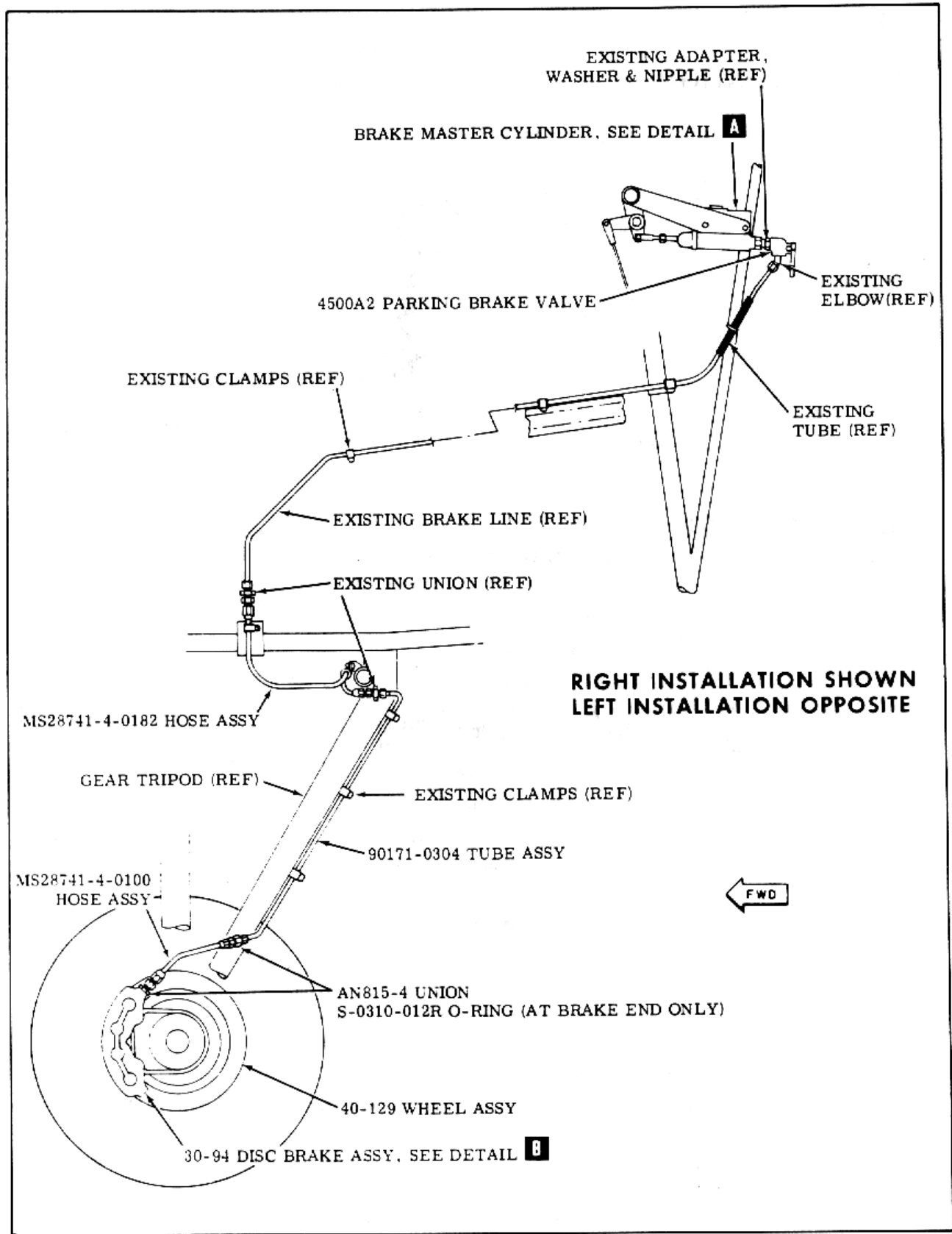
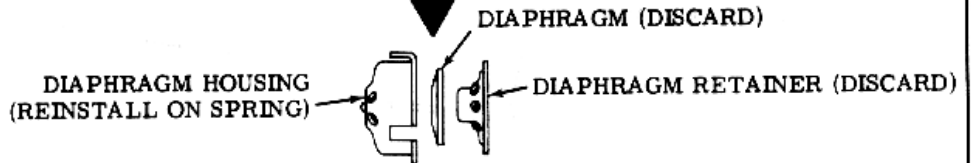
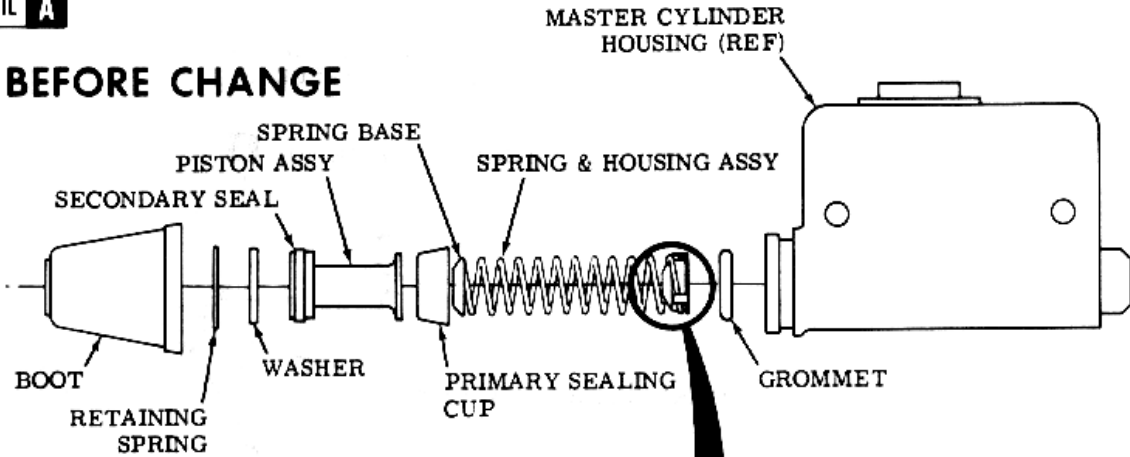


Figure 1. (Sheet 1 of 3)

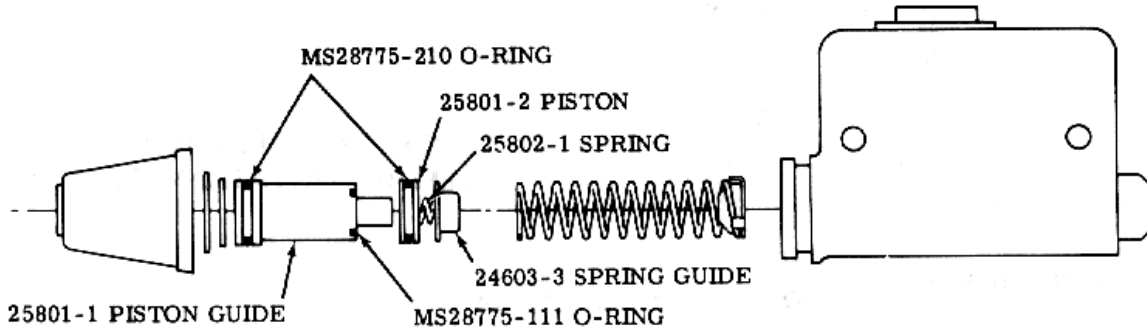
DETAIL **A**

BEFORE CHANGE



AFTER CHANGE

PARTS LISTED BELOW ARE PART OF 25800-1 MASTER CYLINDER KIT



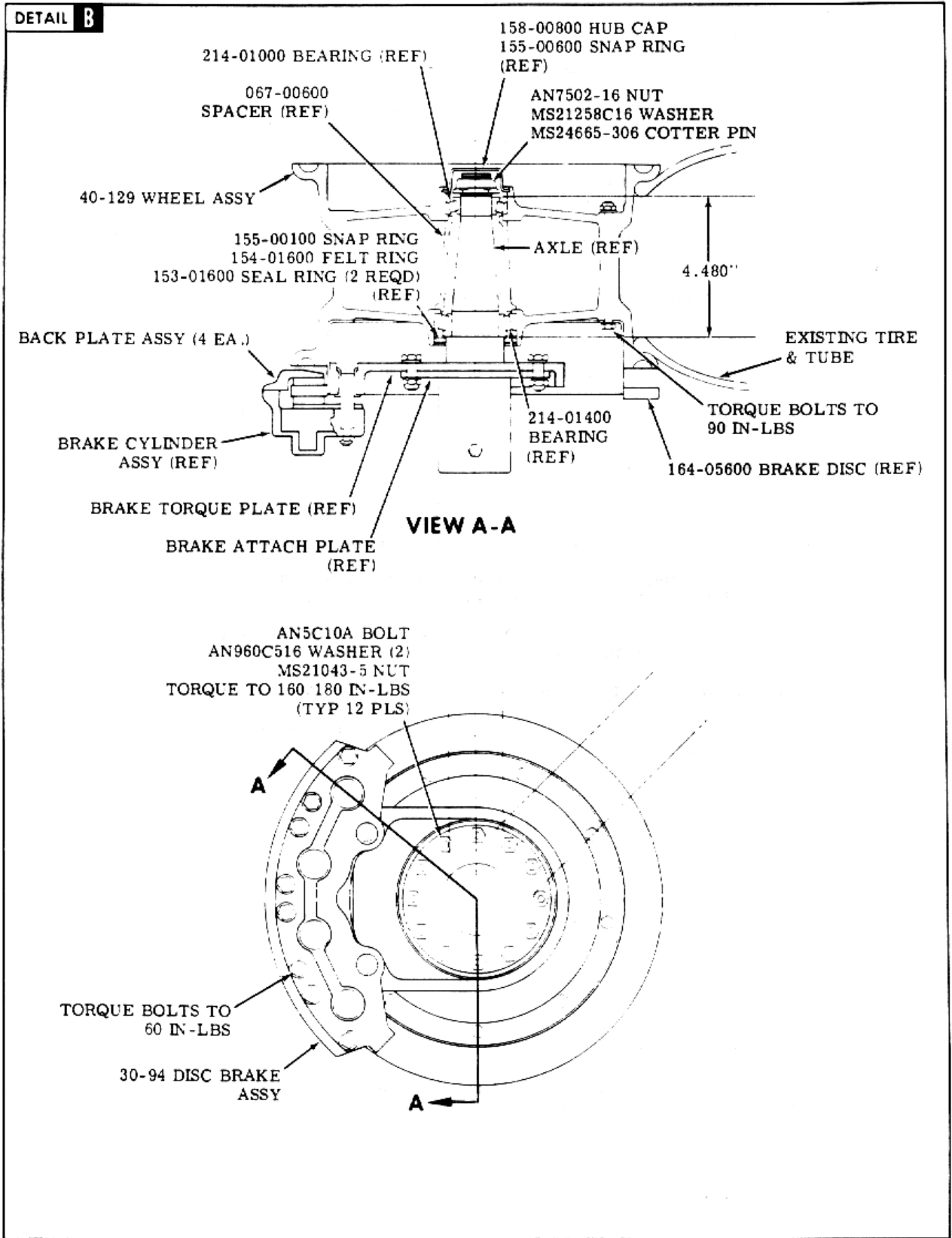


Figure 1. (Sheet 3 of 3)