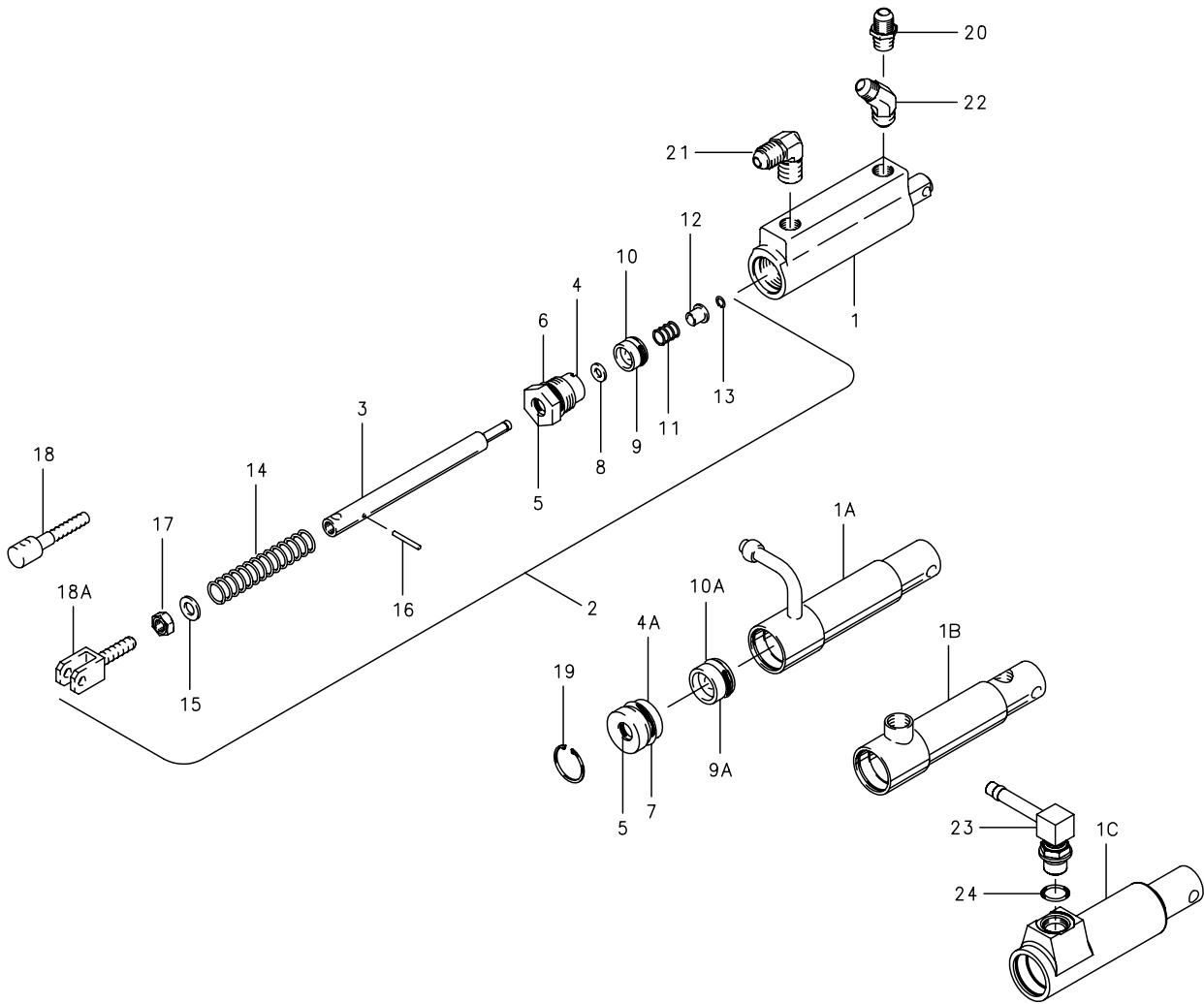


10-19, 10-19A, 10-19B, 10-19D, 10-19F, 10-19G, 10-19H, 10-19J, 10-20, 10-20A, 10-22, 10-22A, 10-22B



NOTE: Parts list for reference only. Contact airframe manufacturer to order master cylinders and components listed.

			PER ASSY.												
FIG.	PART NO.	DESCRIPTION	10-19	10-19A (1)	10-19B (1)	10-19D	10-19F	10-19G	10-19H	10-19J	10-20	10-20A	10-22	10-22A	10-22B
1	144-01204	Cylinder Body (3)	1			1									
	144-01206	Cylinder Body (4)					1	1	1						
	(2)	Cylinder Assembly		1	1										
	144-01201	Cylinder Body										1			
	144-01203	Cylinder Body								1	1				
1A	189-00900	Cylinder Assembly											1		
1B	189-00901	Cylinder Assembly												1	
1C	144-13600	Cylinder Body													1

(Continued on next page)

**Illustrated Parts List****Master Cylinder****Push Type****10-19, 10-19A, 10-19B, 10-19D, 10-19F, 10-19G, 10-19H, 10-19J, 10-20, 10-20A, 10-22, 10-22A, 10-22B**

(Continued from previous page)

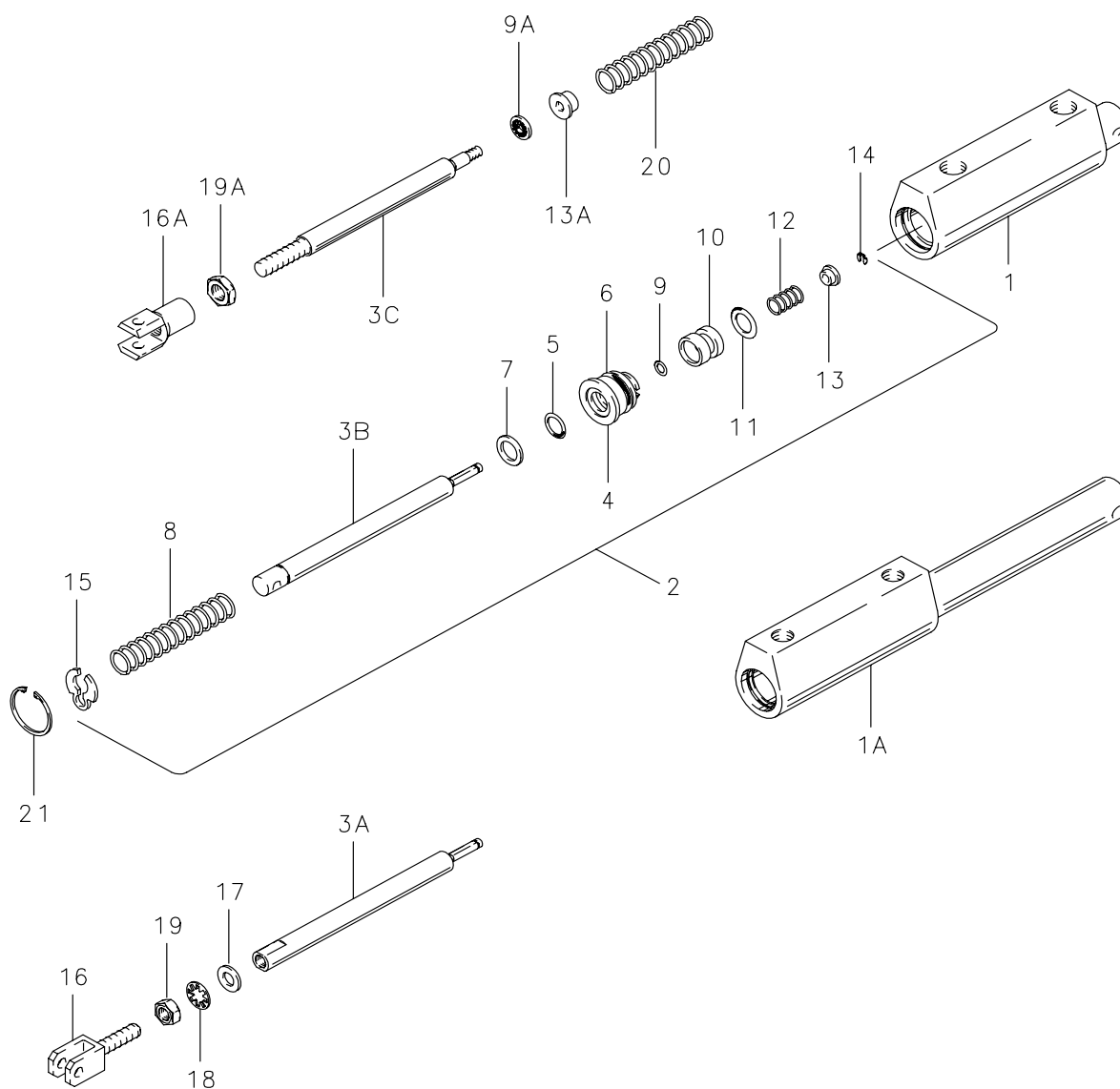
			PER ASSY.												
FIG.	PART NO.	DESCRIPTION	10-19	10-19A (1)	10-19B (1)	10-19D	10-19F	10-19G	10-19H	10-19J	10-20	10-20A	10-22	10-22A	10-22B
2	182-00300	Piston Rod Assembly	1	1	1	1									
	182-00700	Piston Rod Assembly											1	1	1
	182-02600	Piston Rod Assembly					1		1	1					
	182-04100	Piston Rod Assembly						1							
3	142-00500	Rod-Piston	1	1	1	1	1		1	1					
	142-00800	Rod-Piston									1	1			
	142-00900	Rod-Piston											1	1	1
	142-02800	Rod-Piston						1							
4	141-00500	End Gland	1	1	1	1	1	1	1	1	1	1			
4A	141-01000	End Gland											1	1	1
5	101-00700	O-Ring (MS28775-012)	1	1	1	1	1	1	1	1	1	1	1	1	1
6	101-01100	O-Ring (MS28775-113)	1	1	1	1	1	1	1	1	1	1			
7	101-01200	O-Ring (MS28775-114)											1	1	1
8	095-01100	Washer-Seal	1	1	1	1	1	1	1	1	1	1	1	1	1
9	148-00900	Piston	1	1	1	1	1	1	1	1	1	1			
9A	148-01000	Piston											1	1	1
10	101-00800	O-Ring-Piston (MS28775-110)	1	1	1	1	1	1	1	1	1	1			
10A	101-01100	O-Ring-Piston (MS28775-113)											1	1	1
11	082-00800	Spring-Piston	1	1	1	1	1	1	1	1	1	1	1	1	1
12	145-01500	Bushing	1	1	1	1	1	1	1	1	1	1	1	1	1
13	155-00500	Snap Ring	1	1	1	1	1	1	1	1	1	1	1	1	1
14	082-00900	Spring-Return	1	1	1	1	1	1	1	1	1	1	1	1	1
15	095-10200	Washer (AN960-416L)	1	1	1	1	1	1	1	1					
	095-10600	Washer (AN960-616)									1	1	1	1	1
16	223-00100	Roll-Pin									1	1	1	1	1
17	094-03000	Nut-Check (AN316-4)	1	1	1	1	1	1	1	1					
18	143-00400	Clevis	1	1		1									
18A	143-00900	Clevis					1	1	1	1					
19	155-01000	Snap Ring											1	1	1
20	104-00300	Tube Fitting (AN816-4D)					1								
21	104-00400	Tube Fitting (MS20822-4D)	2	2	1				2						
22	104-00500	Tube Fitting (MS20823-4D)			1										
23	104-06900	Fitting													1
24	101-20400	O-Ring													1
	199-505	Repair Kit, O-Rings (Ref.)	1	1		1	1	1	1	1	1	1			
	199-507	Repair Kit, O-Rings (Ref.)											1	1	1

## NOTES:

- (1) Inactive Assembly - Spares support only for parts listed.  
 (2) Inactive Part - No longer available for spares support.  
 (3) Extruded body – formerly used steel body P/N 189-00500 which is no longer available.  
 (4) Extruded body – formerly used steel body P/N 189-00501 which is no longer available.

**Cleveland**  
 Wheels & Brakes



**Illustrated Parts List****Master Cylinder  
Push Type****10-24C, 10-24D, 10-30, 10-30A, 10-30B, 10-70, 10-70A, 10-70B, 10-89****Cleveland**  
Wheels & Brakes

**Illustrated Parts List****Master Cylinder  
Push Type****10-24C, 10-24D, 10-30, 10-30A, 10-30B, 10-70, 10-70A, 10-70B, 10-89**

FIG.	PART NUMBER	DESCRIPTION	QTY. PER ASSY.								
			A	B	C	D	E	F	G	H	J
1	144-03200	Cylinder Body			1	1					
	144-03700	Cylinder Body	1								
	144-03701	Cylinder Body		1							
	144-06800	Cylinder Body						1			
	144-07300	Cylinder Body							1	1	
	144-11900	Cylinder Body					1				
1A	144-11500	Cylinder Body									1
2	182-02000	Piston Rod Assembly	1	1							
	182-02200	Piston Rod Assembly			1						
	182-07500	Piston Rod Assembly									1
	182-07900	Piston Rod Assembly					1				
3A	142-03700	Piston Rod	1	1		1					1
3B	142-03900	Piston Rod			1						
	142-11900	Piston Rod					1				
3C	142-07900	Piston Rod						1	1	1	
4	141-01200	End Gland	1	1							1
	141-02500	End Gland			1	1	1				
	141-04400	End Gland						1	1		
	141-04401	End Gland								1	
5	101-00700	O-Ring (MS28775-012)	1	1				1	1	1	1
	101-00800	O-Ring (MS28775-110)			1	1	1				
6	101-01100	O-Ring (MS28775-113)	1	1	1	1	1	1	1	1	1
7	095-01300	Washer- Wiper	1	1	1	1	1				1
8	082-00900	Spring - Return			1	1	1				
	082-05200	Spring - Return	1	1							1
9	101-00100	O-Ring (MS28775-006)	1	1	1	1	1				1
9A	095-02600	Washer - Seal						1	1	1	
10	148-02300	Piston	1	1							1
	148-02500	Piston			1	1	1				
	148-03800	Piston						1	1	1	
11	101-00800	O-Ring (MS28775-110)			1	1	1				
	101-01100	O-Ring (MS28775-113)	1	1				1	1	1	1
12	082-02100	Spring - Piston	1	1	1	1	1				1
	082-05600	Spring - Piston						1	1	1	
13	145-05800	Bushing	1	1	1	1	1				1
13A	145-06500	Spring Glide						1	1	1	
14	155-04800	Snap Ring	1	1	1	1	1				1
15	155-05000	Snap Ring-Rod			1		1				
16	143-00900	Clevis	1	1		1					
16A	143-01300	Clevis						1	1	1	
17	095-10100	Washer (AN960-616L)	1	1		1					
	095-10200	Washer (AN960-416L)									1
18	095-15600	Washer- Star (MS35333-40)	1	1		1					
19	094-03000	Nut - Check (AN316-4)	1	1		1					1
19A	094-04300	Nut - Check (AN316-5)						1	1	1	
20	082-07400	Spring - Return						1	1	1	
21	155-01200	Snap Ring	1	1							1
	155-04700	Snap Ring			1	1	1				
	155-05500	Snap Ring						1	1	1	
	199-510	Repair Kit, O-Rings (Ref.)	1	1							
	199-512	Repair Kit, O-Rings (Ref.)			1	1	1				
	199-521	Repair Kit, O-Rings (Ref.)						1	1	1	

**NOTE:** Parts list for reference only.  
Contact airframe manufacturer  
to order master cylinders and  
components listed.

**Assy. Number**

A) 10-24C

B) 10-24D

C) 10-30

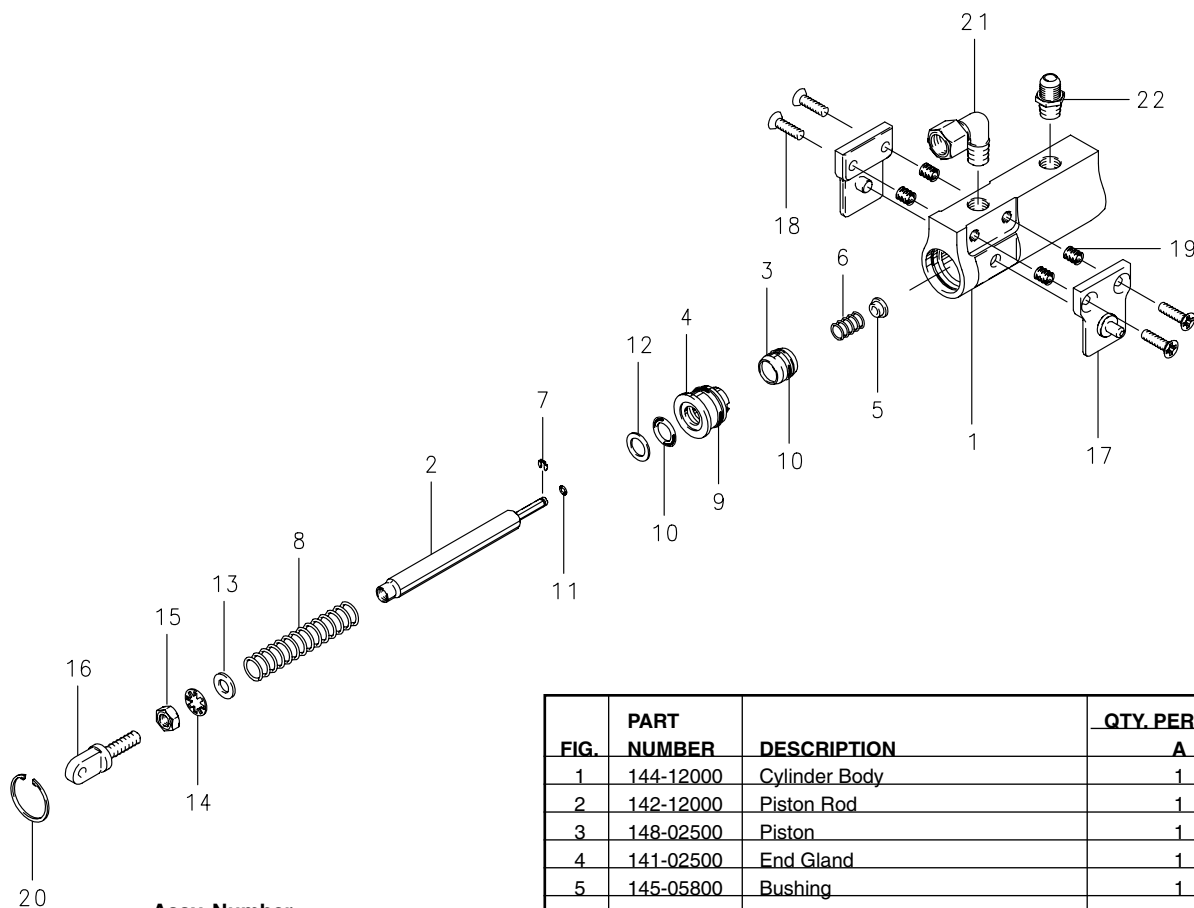
D) 10-30A

E) 10-30B

F) 10-70

G)  
10-70A

H) 10-70B

**Illustrated Parts List****Master Cylinder  
Push Type****10-30C****Assy. Number****A) 10-30C (1)****NOTES:**

- (1) Master Cylinder 10-30C is FAA PMA Approved for use on Slingsby Aviation Ltd. Aircraft Models T67 GRP series. The master cylinder and all components listed are available for sale thru distribution.

FIG.	PART NUMBER	DESCRIPTION	QTY. PER ASSY
			A
1	144-12000	Cylinder Body	1
2	142-12000	Piston Rod	1
3	148-02500	Piston	1
4	141-02500	End Gland	1
5	145-05800	Bushing	1
6	082-02100	Spring	1
7	155-04800	Retaining Ring	1
8	082-13700	Spring	1
9	101-01100	O-Ring (MS28775-113)	1
10	101-00800	O-Ring (MS28775-110)	2
11	101-00100	O-Ring (MS28775-006)	1
12	095-01300	Washer, Wiper	1
13	095-10100	Washer (AN960-616L)	1
14	095-15600	Washer, Star (MS35333-40)	1
15	094-03000	Nut, Jam (AN316-4)	1
16	143-03100	Clevis	1
17	111-10900	Bracket Assembly	2
18	102-17500	Screw (MS24694-S49)	4
19	230-05500	Insert, Locking (MS21209F1-15L)	4
20	155-04700	Ring, Retaining	1
21	104-09300	Elbow, Male	1
22	104-00300	Tube Fitting (AN816-4D)	1
	199-512	Repair Kit, O-Rings (Ref.)	1

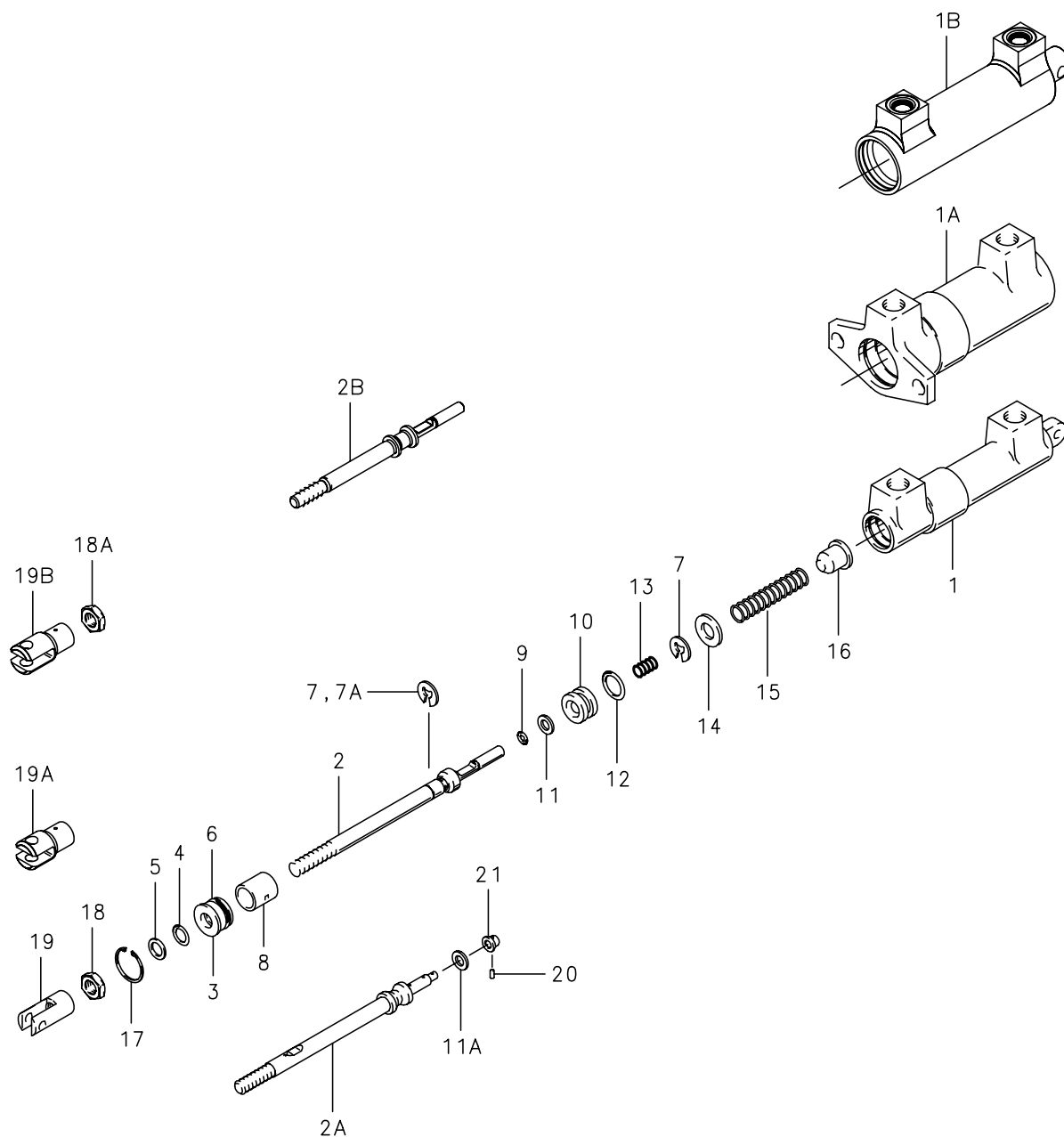
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Wheels & Brakes



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**Illustrated Parts List****Master Cylinder  
Push Type**

10-46, 10-51, 010-05101, 10-52, 10-58D, 10-58E, 10-58F, 10-95

**Cleveland**  
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**Illustrated Parts List****Master Cylinder  
Push Type****10-46, 10-51, 010-05101, 10-52, 10-58D, 10-58E, 10-58F, 10-95**

FIG.	PART NUMBER	DESCRIPTION	QTY. PER ASSY.							
			A	B	C	D	E	F	G	H
1	144-04600	Cylinder Body	1				1			
	144-04601	Cylinder Body						1	1	
	144-05000	Cylinder Body				1				
1A	144-04900	Cylinder Body		1	1					
1B	144-13100	Cylinder Body								1
2	111-04700	Piston Rod Assy.	1							
	111-04900	Piston Rod Assy.				1				
	111-05400	Piston Rod Assy.					1	1		
	182-03700	Piston Rod Assy.		1	1					
2A	142-08201	Piston Rod							1	
2B	142-13200	Piston Rod								1
3	141-02600	End Gland	1				1	1	1	
	141-02800	End Gland				1				
	141-04000	End Gland			1					1
	(3)	End Gland		1						
4	101-26800	O-Ring		1	1					1
	101-00600	O-Ring (MS28775-011)	1			1	1	1	1	
5	100-20006	Ring - Backup (MS28782-6)			1					1
6	101-20200	O-Ring (MS28775-014)	1				1	1	1	
	101-27000	O-Ring		1	1					1
	101-50343	O-Ring (MS28775-016)				1				
7	155-05100	Snap Ring	2	1	1	1	2	2		1
7A	155-07200	Snap Ring		1	1					
8	067-05000	Spacer	1							
	067-05400	Spacer				1				
	067-05500	Spacer		1	1					1
	067-07300	Spacer					1	1	1	
9	101-00300	O-Ring (MS28775-008)	1			1				
	101-26700	O-Ring		1	1					1
10	148-02800	Piston	1							
	148-03700	Piston				1				
	148-04500	Piston			1					1
	(3)	Piston		1						
	148-04900	Piston					1	1	1	
11	095-03400	Washer Seal					1	1		
11A	095-03401	Washer Seal							1	
12	101-00900	O-Ring (MS28775-111)	1				1	1	1	
	101-26900	O-Ring			1					1
	101-01100	O-Ring (MS28775-113)				1				
	(3)	O-Ring		1						
13	082-05500	Spring - Piston	1	1	1	1				1
	082-05501	Spring - Piston					1	1	1	
14	095-10200	Washer (AN960-416L)			1					1
15	082-06000	Spring - Return	1			1	1			
	082-06001	Spring - Return						1	1	
	082-06300	Spring - Return		1	1					1
16	067-07100	Spacer					1	1	1	
17	155-01200	Snap Ring				1				
	155-01300	Snap Ring		1	1					1
	155-05400	Snap Ring	1				1	1	1	
18	094-04300	Nut - Lock (AN316-5)		1	1	1				
18A	094-03000	Nut								1
19	143-01000	Clevis				1				
19A	143-01400	Clevis			1					
19B	143-03500	Clevis								1
20	223-03200	Pin, Roll							1	
21	200-02400	Retainer, Spring							1	

	199-515	Repair Kit, O-Rings (Ref.)	1							
	199-518	Repair Kit, O-Rings (Ref.)			1					1
	199-523	Repair Kit, O-Rings (Ref.)				1				
	199-524	Repair Kit, O-Rings (Ref.)					1	1		
	199-524A	Repair Kit, O-Rings (Ref.)							1	

**NOTE:** Parts list for reference only.  
Contact airframe manufacturer  
to order master cylinders and  
components listed.

**Assy. Number****A) 10-46****B) 10-51 (1)****C) 010-05101****D) 10-52****E) 10-58D (1, 2, 4)****F) 10-58E (6)****G) 10-58F****H) 10-95****NOTES:**

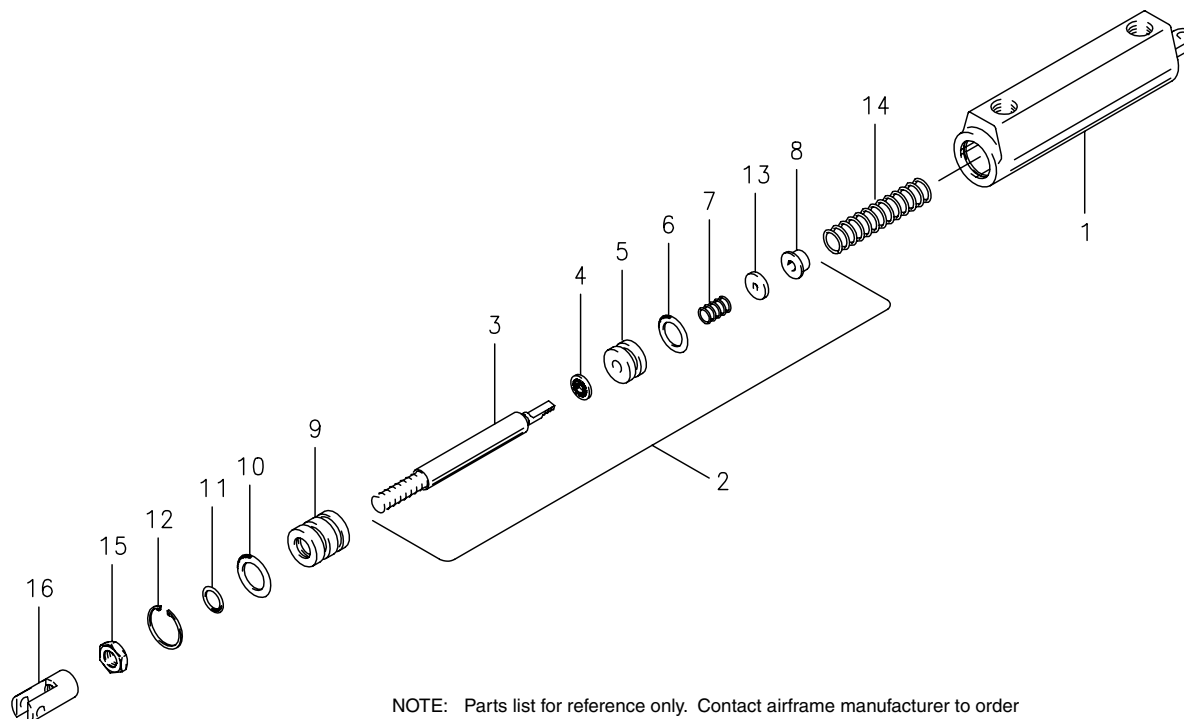
- (1) Inactive assembly - spares support only for parts listed.
- (2) 10-58C replaced by 10-58D.
- (3) Inactive part - No longer available for spares support.
- (4) 10-58D superseded by 10-58E.
- (5) The following Cleveland Master Cylinders were formerly manufactured by Gerdes Product Co.  

C.W.B. NUMBER	GERDES NUMBER
10-46	A-110-27
10-51	A-110-18
10-52	A-110-12
- (6) SB7068-1 Service Bulletin Kit Parts List upgrades master cylinder to 10-58F per Cleveland Service Bulletin SB7068.

**Cleveland**  
Wheels & Brakes





**Illustrated Parts List****Master Cylinder  
Push Type****10-49, 10-50, 10-54, 10-54A, 10-55, 10-55A, 10-55B, 10-88**

NOTE: Parts list for reference only. Contact airframe manufacturer to order master cylinders and components listed.

**NOTES:**

- (1) The following Cleveland master cylinders were formerly manufactured by Gerdes Products Co.

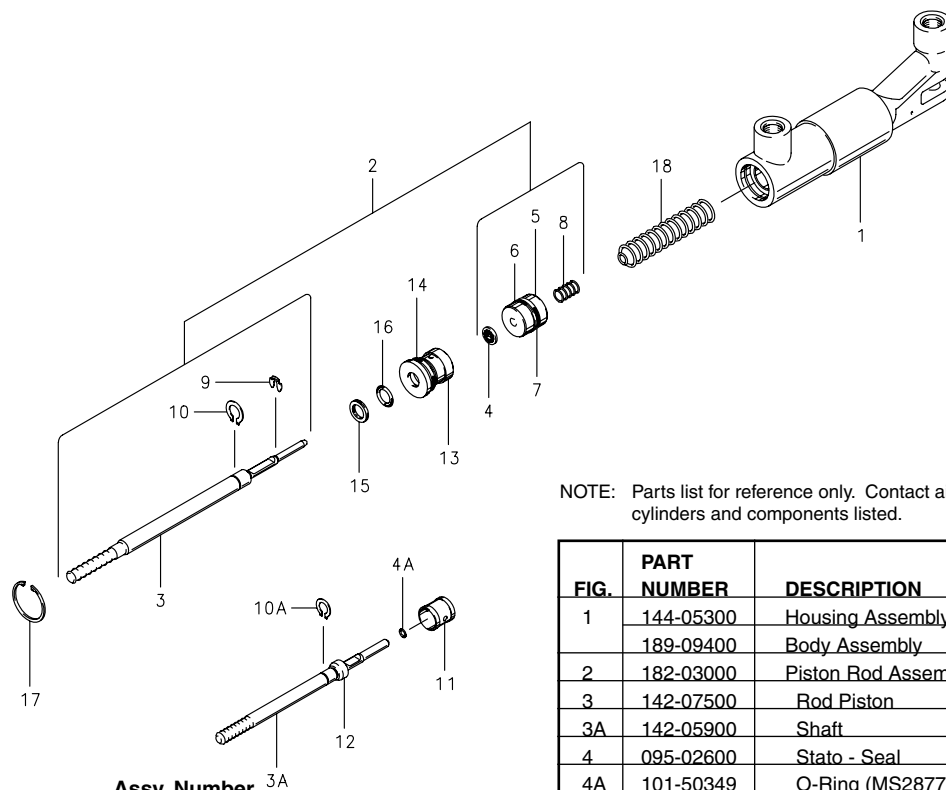
C.W.B. NUMBER	GERDES NUMBER
10-49	A-110-37
10-50	A-110-39
10-54	A-110-10

- (2) Master Cylinder 10-55B replaces 10-55A. Both are FAA PMA Approved for use on General Avia Aircraft Model F22. The master cylinder and all components listed are available thru distribution.

FIG.	PART NO.	DESCRIPTION	QTY. PER ASSY.						
			10-49	10-50	10-54	10-54A	10-55 10-55A (2)	10-55B (2)	10-88
1	144-04700	Cylinder Body	1		1	1			
	144-04800	Cylinder Body		1			1	1	1
2	182-02800	Piston Rod Assembly	1						
	182-02801	Piston Rod Assembly							1
	182-02802	Piston Rod Assembly						1	
3	142-05500	Piston Rod	1			1			1
	142-05300	Piston Rod		1					
	142-05400	Piston Rod			1		1		
	142-05502	Piston Rod						1	
4	095-02600	Stat-O-Seal	1	1	1	1	1	1	1
5	148-03400	Piston	1	1	1	1	1	1	1
6	101-00900	O-Ring (MS28775-111)	1	1	1	1	1	1	1
7	082-05600	Spring	1	1	1	1	1	1	1
8	145-06500	Guide-Spring	1	1	1	1	1	1	1
13	067-13300	Spacer				1			1
9	141-02700	Gland-End	1	1	1	1	1	1	1
10	101-01000	O-Ring (MS28775-112)	1	1	1	1	1	1	1
11	101-00700	O-Ring (MS28775-012)	1	1	1	1	1	1	1
12	155-05400	Snap Ring	1	1	1	1	1	1	1
14	082-06100	Spring-Return	1	1	1	1	1	1	1
15	094-04300	Nut-Check (AN316-5)	1	1	1	1	1	1	
16	143-01000	Clevis			1	1	1	1	
	143-01200	Clevis	1						
	143-01300	Clevis		1					
	199-516	Repair O-Ring Kit (Ref)	1	1	1		1	1	

**Cleveland**  
Wheels & Brakes



**Illustrated Parts List****Master Cylinder  
Push Type****010-06000, 010-06600****Assy. Number****A) 010-06000****B) 010-06600 (1)****NOTES:**

- (1) 010-06600 and spares are available thru distribution; PMA approved part used in 199-15301 Wheeled Landing Gear Kit for Bell 412.
- (2) The following Cleveland master cylinders were formerly manufactured by Gerdes Product Co.

C.W.B. NUMBER	GERDES NUMBER
010-06000	A-2160-1

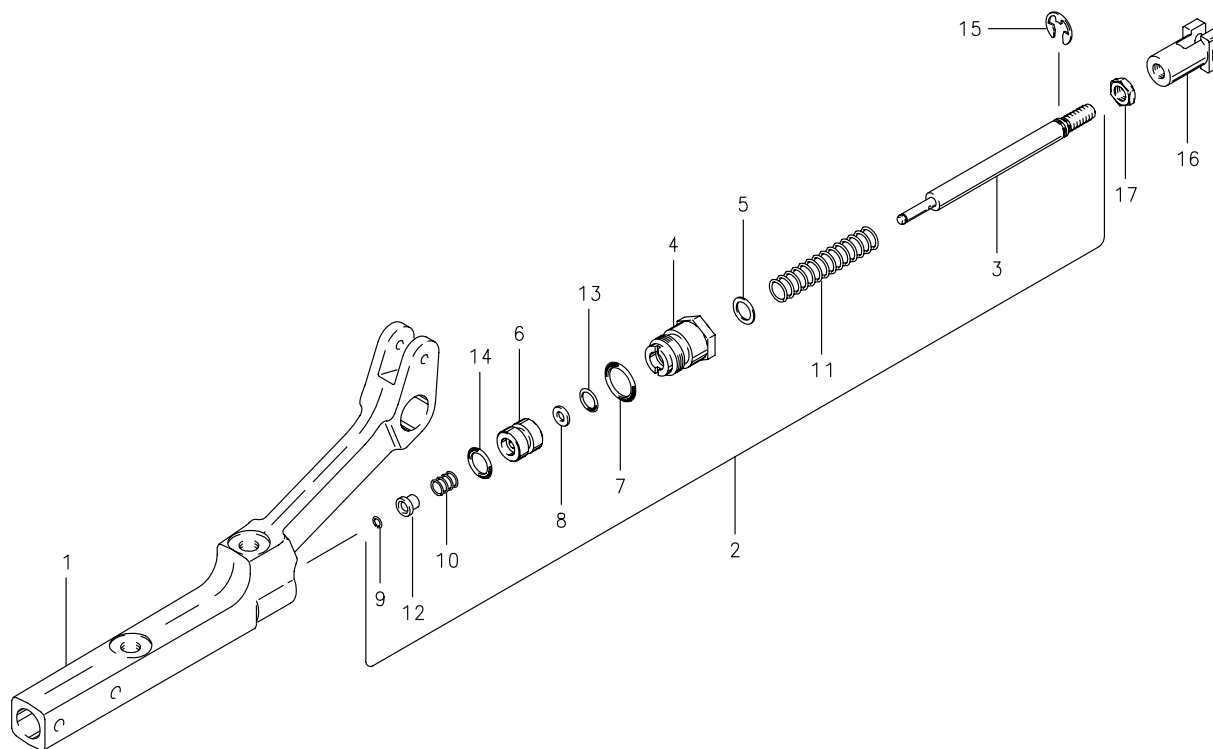
NOTE: Parts list for reference only. Contact airframe manufacturer to order master cylinders and components listed.

FIG.	PART NUMBER	DESCRIPTION	QTY. PER ASSY.	
			A	B
1	144-05300	Housing Assembly	1	
	189-09400	Body Assembly		1
2	182-03000	Piston Rod Assembly		1
3	142-07500	Rod Piston		1
3A	142-05900	Shaft	1	
4	095-02600	Stato - Seal		1
4A	101-50349	O-Ring (MS28775-007)	1	
5	148-04400	Piston		1
	148-03900	Piston	1	
6	100-20012	Back-up Ring (MS28782-12)		1
	100-10143	Back-up Ring (MS28774-111)	1	
7	101-50357	O-Ring (MS28775-114)		1
	101-00900	O-Ring (MS28775-111)	1	
8	082-07100	Spring		1
	082-05500	Spring	1	
9	155-07100	Snap Ring		1
	095-13100	Washer (AN960C10)	1	
10	155-06500	Snap Ring		1
10A	155-05700	Snap Ring	1	
11	067-05600	Spacer	1	
12	139-06200	Thrust Collar	1	
13	141-03400	End Gland		1
	141-03200	End Gland	1	
14	101-50369	O-Ring (MS28775-017)		1
	101-20200	O-Ring (MS28775-014)	1	
15	100-20008	Back-up Ring (MS28782-B)		1
16	101-00800	O-Ring (MS28775-110)		1
	101-50341	O-Ring (MS28775-011)	1	
17	155-06700	Snap Ring		1
	155-05400	Snap Ring	1	
18	082-06900	Spring - Return		1
	082-06400	Spring - Return	1	

	199-532	Repair O-Ring Kit (Ref.)		1
	199-569	Repair O-Ring Kit (Ref.)	1	

**Cleveland**  
Wheels & Brakes



**Illustrated Parts List****Master Cylinder  
Push Type****10-73**

NOTE: Parts list for reference only. Contact airframe manufacturer to order master cylinders and components listed.

**Assy. Number**

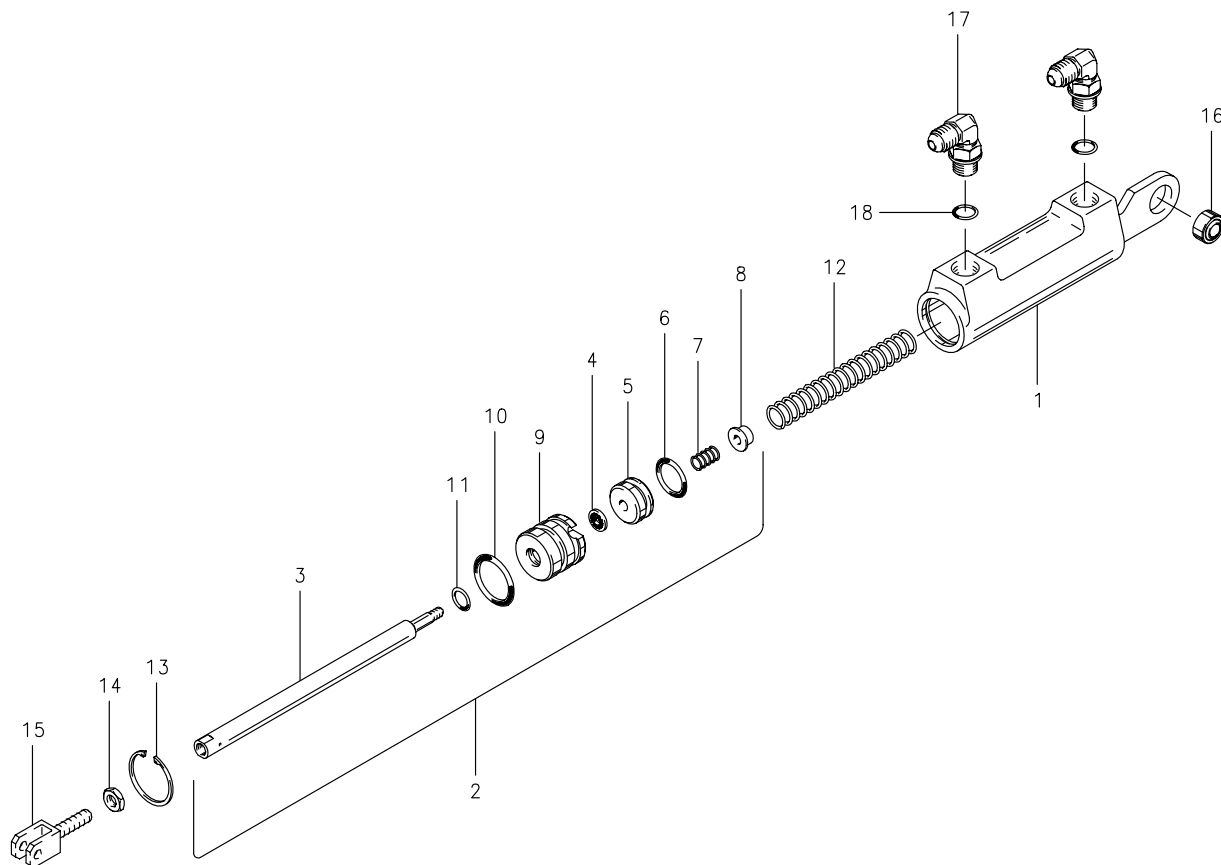
A) 10-73

FIG.	PART NUMBER	DESCRIPTION	QTY. PER ASSY.
			A
1	144-08800	Cylinder Body	1
2	182-04300	Piston Rod Assy.	1
3	142-09100	Piston Rod	1
4	141-05200	Packing Gland	1
5	095-04000	Washer	1
6	148-05300	Master Cylinder Piston	1
7	101-01200	O-Ring (MS28775-114)	1
8	095-01100	Washer-Seal	1
9	155-00500	Snap Ring	1
10	082-00800	Spring	1
11	082-00900	Spring	1
12	145-01500	Bushing	1
13	101-00700	O-Ring (MS28775-012)	1
14	101-00900	O-Ring (MS28775-011)	1
15	155-09000	Retainer Ring	1
16	143-02000	Clevis	1
17	094-04300	Nut (AN316-5)	1
18	215-01500	Plug	2

**Cleveland**  
Wheels & Brakes



**10-78, 10-78A, 10-78B**



NOTE: Parts list for reference only. Contact airframe manufacturer to order master cylinders and components listed.

**Assy. Number**

- A) 10-78
- B) 10-78A
- C) 10-78B

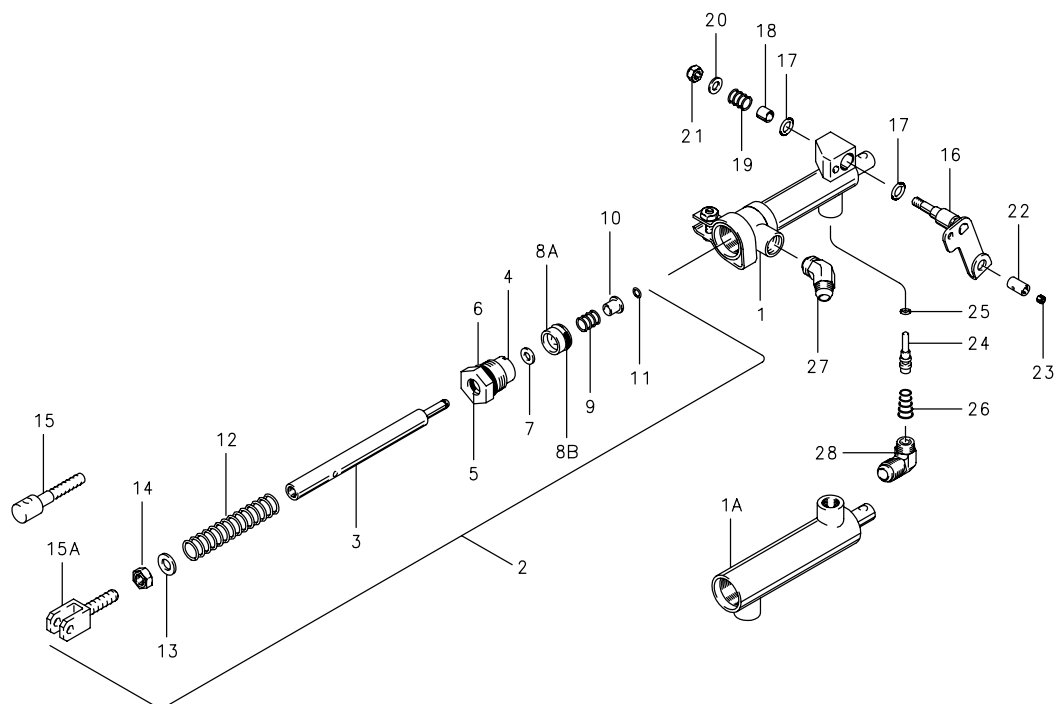
FIG.	PART NUMBER	DESCRIPTION	QTY. PER ASSY.		
			A	B	C
1	189-04100	Cylinder Body	1	1	1
2	182-04800	Piston Rod Assy.	1	1	1
3	142-10400	Rod-Piston	1	1	1
4	095-02600	Stat-O-Seal	1	1	1
5	148-04100	Piston	1	1	1
6	101-01200	O-Ring (MS28775-114)	1	1	1
7	082-05600	Spring-Piston	1	1	1
8	145-06500	Spring Guide	1	1	1
9	141-03000	End Gland	1	1	1
10	101-50117	O-Ring (MS28775-117)	1	1	1
11	101-00700	O-Ring (MS28775-012)	1	1	1
12	082-06100	Return Spring	1	1	1
13	155-05500	Retaining Ring	1	1	1
14	094-03000	Nut Jam (AN316-4)	1	1	1
15	143-02200	Clevis	1	1	1
16	214-82600	Spherical Bearing	1	1	1
17	104-03100	Fitting	2	2	1
	104-06900	Fitting			1
18	101-20400	O-Ring (MS28778-4)	2	2	1

	199-555	Repair Kit, O-Ring (Ref.)	1		
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# Cleveland

Wheels & Brakes



**Illustrated Parts List****Master Cylinder  
Push Type with Parking Brake****10-5, 10-5B, 10-5C, 10-5E**

**NOTE:** Parts list for reference only. Contact airframe manufacturer to order master cylinders and components listed.

FIG.	PART NO.	DESCRIPTION	PER ASSY.			
			10-5	10-5B (1)	10-5C	10-5E
1	189-00100	Hydraulic Cylinder Assembly	1		1	
	189-01200	Hydraulic Cylinder Assembly				1
1A	189-02300	Hydraulic Cylinder Assembly		1		
2	182-00300	Piston Rod Assembly	1	1		
	182-02600	Piston Rod Assembly			1	1
3	142-00500	Rod	1	1	1	1
4	141-00500	Gland-End	1	1	1	1
5	101-00700	O-Ring-Gland (MS28775-012)	1	1	1	1
6	101-01100	O-Ring-Gland (MS28775-113)	1	1	1	1
7	095-01100	Washer-Seal	1	1	1	1
8A	148-00900	Piston	1	1	1	1
8B	101-00800	O-Ring (MS28775-110)	1	1	1	1
9	082-00800	Spring	1	1	1	1
10	145-01500	Bushing	1	1	1	1
11	155-00500	Ring-Snap	1	1	1	1
12	082-00900	Spring-Return	1	1	1	1
13	095-10200	Washer (AN960-416L)	1	1	1	1
14	094-00300	Nut-Jam (AN316-4)	1	1	1	1
15	143-00400	Clevis	1	1		
15A	143-00900	Clevis			1	1

FIG.	PART NO.	DESCRIPTION	PER ASSY.			
			10-5	10-5B (1)	10-5C	10-5E
16	181-00200	Cam Assembly	1		1	1
17	101-00500	O-Ring (MS28775-010)	2		2	2
18	145-00700	Bushing	1		1	1
19	082-01000	Spring	1		1	1
20	095-10300	Washer (AN960-10)	1		1	1
21	094-10200	Nut (AN364-1032)	1		1	1
22	145-00900	Bushing	1		1	1
23	102-00100	Screw-Set (#8-32x1/8)	1		1	1
24	146-00200	Valve	1		1	1
25	101-00100	O-Ring (MS28775-006)	1		1	1
26	082-01100	Spring	1		1	1
27	104-00500	Tube Fitting (MS20823-4D)	2	2	1	2
28	104-00400	Tube Fitting (MS20822-4D)			1	

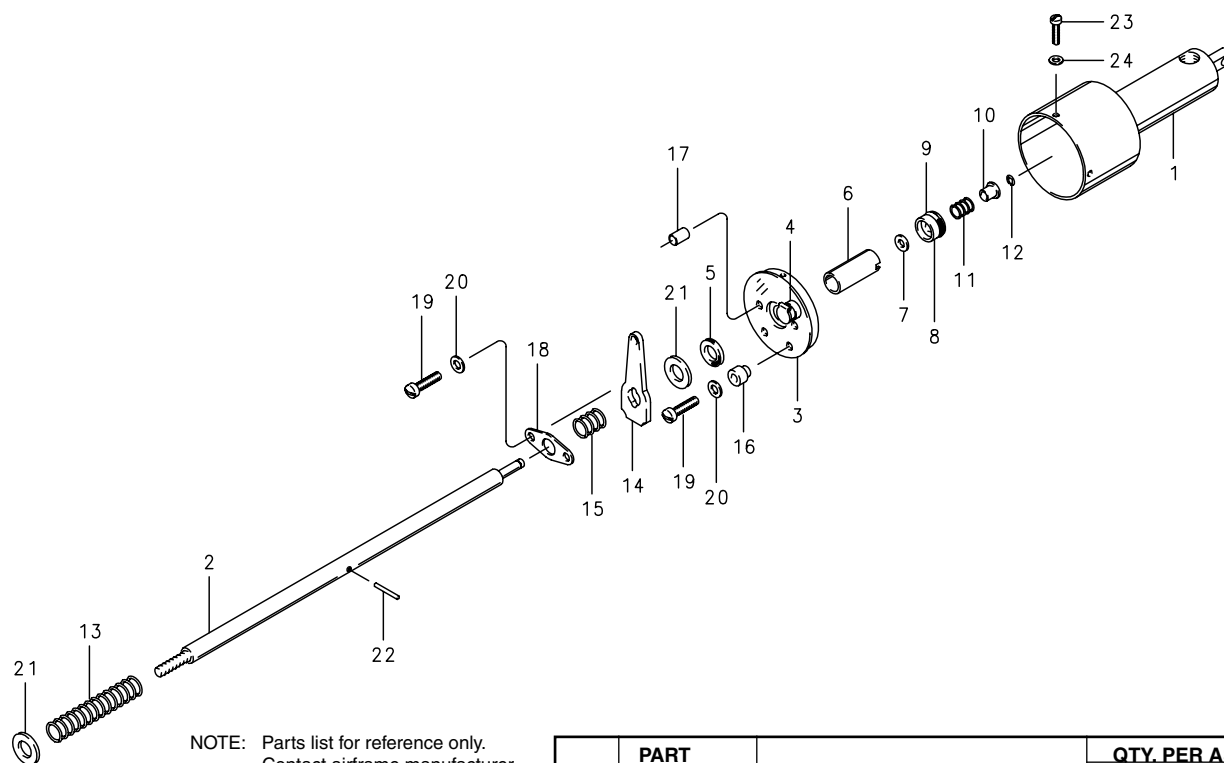
	199-502	Repair Kit, O-Rings (Ref.)	1		1	1
	199-503	Repair Kit, O-Rings (Ref.)		1		

**NOTES:**

(1) 10-5B does not include Parking Brake.

**Cleveland**  
Wheels & Brakes



**Illustrated Parts List****Master Cylinder  
Push Type with Reservoir****10-21, 10-21A**

NOTE: Parts list for reference only.  
Contact airframe manufacturer  
to order master cylinders and  
components listed.

**Assy. Number****A) 10-21****B) 10-21A**

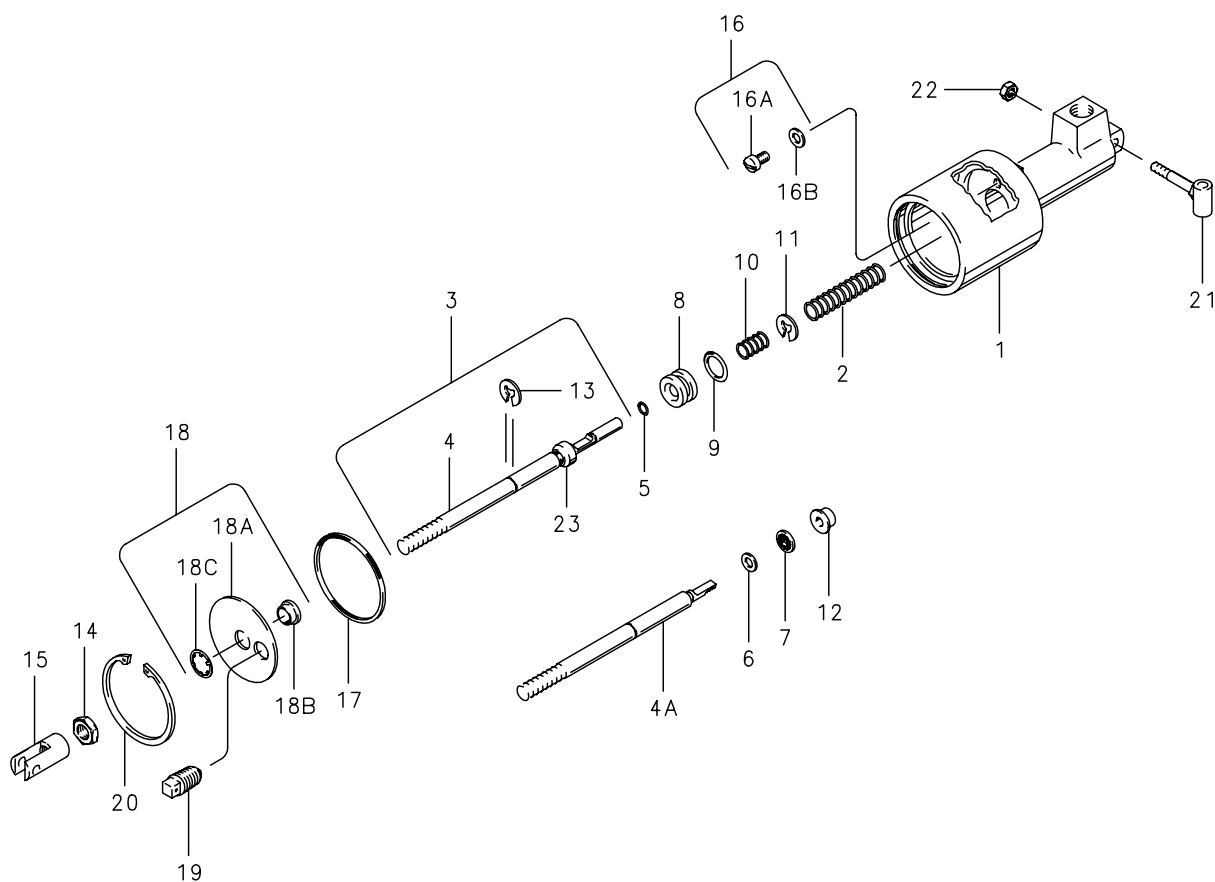
FIG.	PART NUMBER	DESCRIPTION	QTY. PER ASSY.	
			A	B
1	189-01100	Cylinder Assy.	1	1
	182-00900	Piston Rod Assy.	1	
	182-01900	Piston Rod Assy.		1
2	142-03600	Piston Rod		1
	218-00100	Piston Rod	1	
3	141-01100	End Gland	1	
	141-01101	End Gland		1
4	213-00100	Fitting (GTTTS 502 "G")	1	1
5	154-01500	Felt-Rod	1	1
6	067-01300	Spacer-Piston	1	1
7	095-01100	Washer	1	1
8	148-01000	Piston	1	1
9	101-01100	O-Ring (MS28775-113)	1	1
10	145-01500	Bushing	1	1
11	082-00800	Spring	1	1
12	155-00500	Ring-Snap	1	1
13	082-00900	Spring	1	1
14	149-00100	Lever-Parking	1	
15	082-01800	Spring	1	
16	067-01200	Spacer	2	
17	145-02300	Bushing	2	
18	229-00100	Plate-Spring Retainer	1	
19	102-05700	Screw-Fil. Hd. (AN500-10-10)	4	
20	095-15400	Washer-Lock (AN936-A10)	4	
21	095-10600	Washer (AN960-616)	1	2
22	223-00100	Rollpin	1	1
23	102-05200	Screw-Fil. Hd. (AN500-6-4)	3	3
24	095-16000	Washer-Lock (MS35338-41)	3	3
	199-506	Repair Kit, O-Rings (Ref.)	1	1

**Cleveland**  
Wheels & Brakes



**Illustrated Parts List****Master Cylinder  
Push Type with Reservoir**

10-34, 10-35, 10-36, 10-38, 10-39, 10-45, 10-69



**Illustrated Parts List****Master Cylinder  
Push Type with Reservoir****10-34, 10-35, 10-36, 10-38, 10-39, 10-45, 10-69**

FIG.	PART NUMBER	DESCRIPTION	QTY. PER ASSY.						
			A	B	C	D	E	F	G
1	144-03800	Cylinder Body	1			1		1	
	144-03900	Cylinder Body		1					
	144-04000	Cylinder Body			1				
	144-04200	Cylinder Body					1		
	144-06700	Cylinder Body							1
2	082-05400	Spring-Return	1	1		1	1	1	
	082-05700	Spring-Return			1				1
3	182-05000	Piston Rod Assy.				1	1	1	
4	142-04000	Piston Rod	1	1					
4A	142-04300	Piston Rod			1				
	142-08000	Piston Rod							1
5	101-00300	O-Ring (MS28775-008)	1	1		1	1	1	
6	095-12800	Washer			1				1
7	095-02600	Stat-O-Seal			1				1
8	148-02800	Piston	1	1		1	1	1	
	148-02900	Piston			1				
	148-04700	Piston							1
9	101-00900	O-Ring Piston (MS28775-111)	1	1		1	1	1	
	101-01300	O-Ring Piston (MS28775-115)							1
	101-01000	O-Ring Piston (MS28775-112)			1				
10	082-05500	Spring-Piston	1	1		1	1	1	1
	082-05600	Spring-Piston			1				
11	155-05100	Snap Ring	1	1		1	1	1	
12	145-06500	Spring Guide			1				1
13	155-07200	Snap Ring	1	1		1	1	1	
14	094-04300	Nut-Check (AN316-5)	1	1	1	1	1	1	1
15	143-01000	Clevis-Rod	1	1	1	1			1
	143-01100	Clevis-Rod					1		
16	111-04300	Screw & Washer Assy.				1	1	1	
16A	102-20200	Screw	1	1	1				1
16B	095-10300	Washer	1	1	1				1
17	101-60001	O-Ring, reservoir	1	1	1	1	1	1	1
18	111-04600	Cover Assy.			1	1	1	1	1
18A	147-00700	Cover Plate	1	1					
18B	145-06400	Bushing-Bronze	1	1					
18C	155-06900	Retaining Ring	1	1					
19	140-01900	Filler Plug	1	1	1	1	1	1	1
20	155-06300	Snap Ring	1	1	1	1	1	1	1
21	110-05200	Adapter-Clevis				1			
22	094-12300	Nut-Lock (AN365-1032)				1			
23	139-06200	Thrust Collar	1	1					

	199-513	Seal Repair Kit	1	1		1	1	1	
	199-514	Seal Repair Kit			1				
	199-577	Seal Repair Kit							1

NOTE: Parts list for reference only.  
Contact airframe manufacturer  
to order master cylinders and  
components listed.

**Assy. Number****A) 10-34****B) 10-35****C) 10-36****D) 10-38****E) 10-39****F) 10-45****G) 10-69 (1)****NOTES:**

(1) 10-69 and spares are available thru distribution. PMA approved details of 199-115 kit for Cessna 441.

(2) The following Cleveland master cylinders were formerly manufactured by Gerdes Products Co.

C.W.B. NUMBER	GERDES NUMBER
10-34	A-049-3
10-35	A-049-4
10-36	A-049-6
10-39	A-049-9
10-45	A-049-35

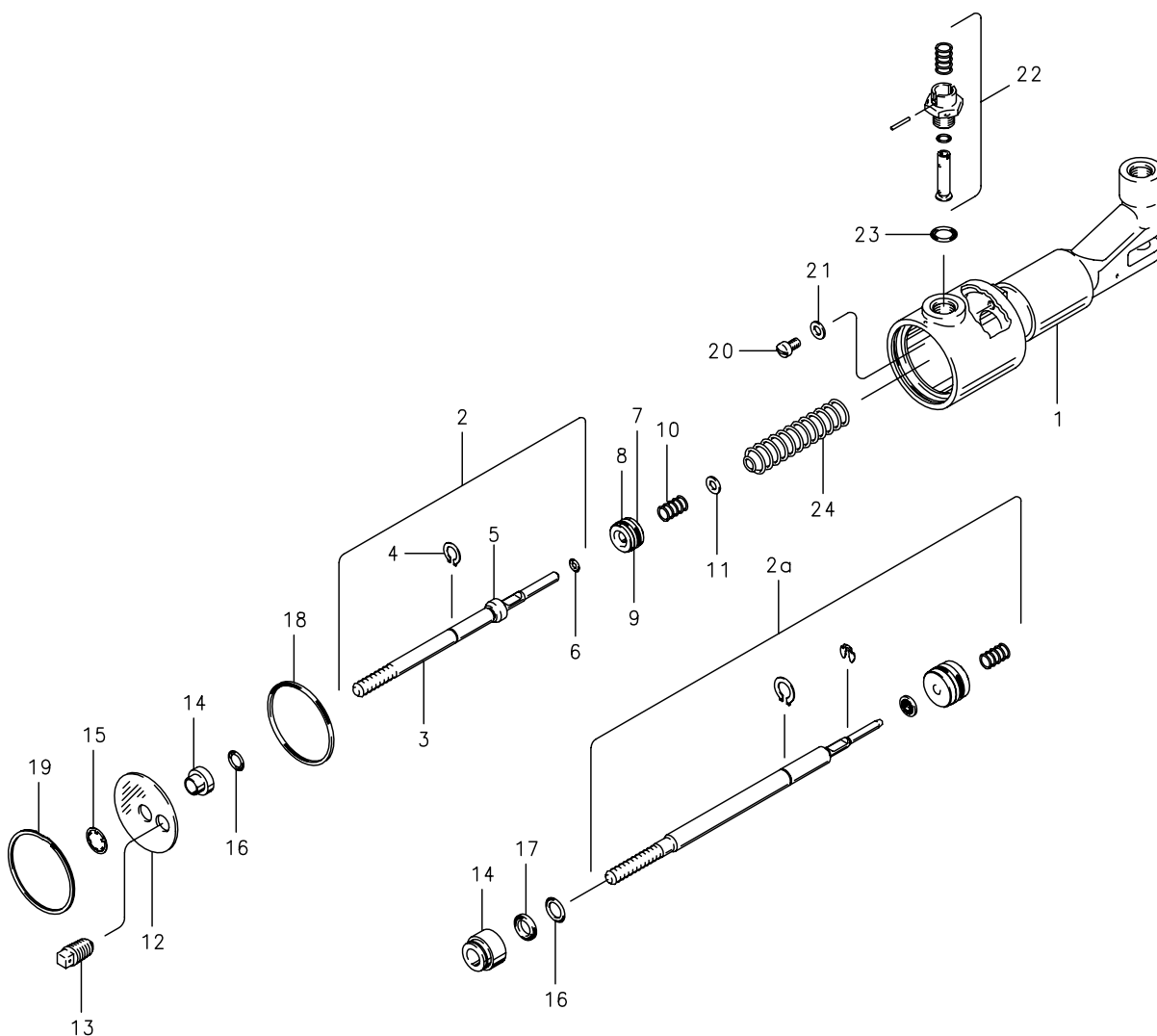
**Cleveland**  
Wheels & Brakes





**Illustrated Parts List****Master Cylinder  
Push Type with Reservoir**

010-05700, 010-05701, 010-06500



**Cleveland**  
Wheels & Brakes



**Illustrated Parts List****Master Cylinder  
Push Type with Reservoir****010-05700, 010-05701, 010-06500**

FIG.	PART NUMBER	DESCRIPTION	QTY. PER ASSY.		
			A	B	C
1	189-09600	Hydraulic Cylinder Assy.	1	1	
	189-06500	Hydraulic Cylinder Assy.			1
2	182-03300	Piston Rod Assy.		1	
2A	182-02700	Piston Rod Assy.			1
3	142-05800	Piston Rod	1	1	
	142-07600	Piston Rod			1
4	155-05600	Snap Ring	1	1	
	155-06500	Snap Ring			1
5	139-06200	Thrust Collar	1	1	
6	101-50349	O-Ring (MS28775-007)	1	1	
	095-02600	Stato-Seal			1
7	148-03901	Piston		1	
	148-04200	Piston			1
	148-03900	Piston	1		
8	101-00900	O-Ring (MS28775-111)	1	1	
	101-01200	O-Ring (MS28775-114)			1
9	100-10143	Backup Ring (MS28774-111)	1	1	
	100-20012	Backup Ring (MS28782-12)			1
10	082-05500	Spring	1	1	
	082-07100	Spring			1
11	095-13100	Washer	1	1	
	155-07100	Retaining Ring			1
12	147-00700	Cover Plate	1	1	
	147-00900	Cover Plate			1
13	140-02000	Plug-Vented	1	1	1
14	141-03101	Gland		1	
	(3)	Gland	1		
	145-07100	Bushing			1
15	155-06900	Retaining Ring		1	
	155-07300	Retaining Ring			1
16	101-50341	O-Ring (MS28775-011)	1	1	
	101-00800	O-Ring (MS28775-110)			1
17	100-20008	Backup-Ring (MS28782-8)			1
18	101-60001	O-Ring		1	1
19	155-05200	Retaining Ring	1	1	
	155-06300	Retaining Ring			1
20	102-20200	Button Head Screw	1	1	1
21	095-13100	Washer (AN960-C-10)	1	1	
	095-10300	Washer (AN960-10)			1
22	111-04500	Reservoir Valve Assembly	1	1	1
23	101-20800	O-Ring (MS28778-4)	1	1	1
24	082-06400	Return Spring	1	1	
	082-06900	Return Spring			1

	199-531	Repair O-Ring Kit (Ref.)			1
	199-568	Repair O-Ring Kit (Ref.)		1	

NOTE: Parts list for reference only.  
Contact airframe manufacturer  
to order master cylinders and  
components listed.

**Assy. Number****A) 010-05700 (1)****B) 010-05701****C) 010-06500 (2)****NOTES:**

- (1) Inactive assembly - spares support only for parts listed.
- (2) 010-06500 and spares are available thru distribution; PMA approved part used in 199-15301 Wheeled Landing Gear Kit for Bell 412.
- (3) Inactive part - no longer available for spares support.
- (4) The following Cleveland master cylinders were formerly manufactured by Gerdes Product Co.

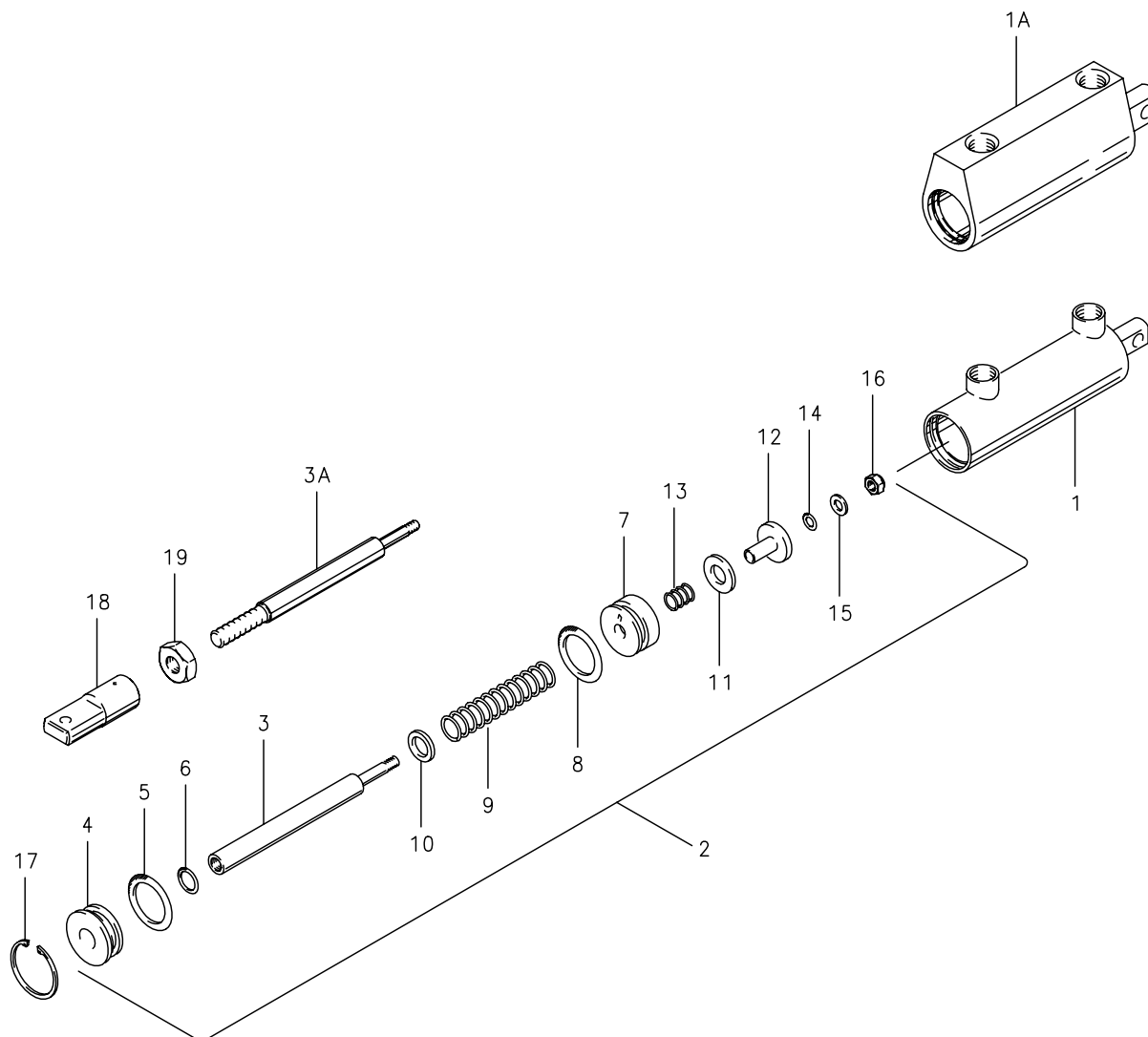
C.W.B. NUMBER	GERDES NUMBER
010-05700	A-1880-1

**Cleveland**  
Wheels & Brakes



**Illustrated Parts List****Master Cylinder  
Pull Type**

10-17, 10-23, 10-23A, 10-23C, 10-23F, 10-75, 10-86, 10-86A



**Illustrated Parts List****Master Cylinder  
Pull Type****10-17, 10-23, 10-23A, 10-23C, 10-23F, 10-75, 10-86, 10-86A**

FIG.	PART NUMBER	DESCRIPTION	QTY. PER ASSY.							
			A	B	C	D	E	F	G	H
1	189-02500	Cylinder Body		1						
1A	144-03600	Cylinder Body			1	1	1			
	144-09400	Cylinder Body						1		
	144-11300	Cylinder Body							1	1
	144-12300	Cylinder Body (1)	1							
2	182-00800	Piston Rod Assembly	1							
	182-02400	Piston Rod Assembly		1	1	1				
	182-02402	Piston Rod Assembly						1		
	182-04600	Piston Rod Assembly						1		
	182-07300	Piston Rod Assembly							1	
3	142-00700	Piston Rod	1	1	1	1			1	
	142-09900	Piston Rod						1		
3A	142-00702	Piston Rod					1			1
4	141-00800	End Gland	1	1	1	1	1			
	141-06001	End Gland						1		
	141-07600	End Gland							1	1
5	101-01400	O-Ring (MS28775-116)	1	1	1	1	1			
	101-50117	O-Ring (MS28775-117)						1		
	101-50119	O-Ring (MS28775-119)							1	1
6	101-00700	O-Ring (MS28775-012)	1	1	1	1	1		1	1
	101-50110	O-Ring (MS28775-110)						1		
7	148-00800	Piston	1							
	148-02600	Piston		1	1	1	1	1		
	148-06900	Piston							1	1
8	101-01300	O-Ring (MS28775-115)	1							
	101-01400	O-Ring (MS28775-116)		1	1	1	1			
	101-50116	O-Ring (MS28775-116)						1		
	101-27200	O-Ring (MS28775-212)							1	1
9	082-01900	Spring, Return	1	1	1	1	1	1		
	082-12400	Spring, Return							1	1
10	095-10600	Washer (AN960-616)	1	1	1	1	1		1	1
11	095-25100	Washer Seal	1	1	1	1	1	1	1	1
12	146-00500	Valve	1	1	1	1	1	1	1	1
13	082-01000	Spring	1	1	1	1	1	1	1	1
14	101-00300	O-Ring (MS28775-008)	1	1	1	1	1	1	1	1
15	095-10300	Washer (AN960-10)	1	1	1	1	1	1	1	1
16	094-10200	Nut (AN364-1032)	1	1	1	1		1	1	
	094-14000	Nut					1			1
17	155-01100	Ring, Snap	1	1	1	1	1			
	155-01600	Ring, Snap						1		
	155-12500	Ring, Snap							1	1
18	143-03200	Clevis					1			1
19	094-04300	Nut					1			1

	199-551	Repair Kit O-Rings (Ref.)						1		
	199-504	Repair Kit O-Rings (Ref.)	1							
	199-508	Repair Kit O-Rings (Ref.)		1	1	1	1			
	199-567	Repair Kit O-Rings (Ref.)							1	1

NOTE: Parts list for reference only.  
Contact airframe manufacturer  
to order master cylinders and  
components listed.

**Assy Number**

A) 10-17

B) 10-23

C) 10-23A

D) 10-23C

E) 10-23F

F) 10-75

G) 10-86

H) 10-86A

**NOTES:**

- (1) Extruded body – formerly used  
steel body P/N 189-01000 which  
is no longer available.

**Cleveland**  
Wheels & Brakes



## Notes

[illegible]