

# PIPER PA-20, PA-22

## Piper PA-20, PA-22 Section Index

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**For Batteries, Brakes, Propellers,  
Wheels and Windshields, look in the  
specific sections in this catalog.**

## Manuals



<i>Description</i>	<i>Part No</i>
PA-20 115 hp. Flight Manual.....	20FM115
PA-20 125 hp. Flight Manual.....	20FM125
PA-20 115-125 hp. and PA-22 125 hp. Owners Manual .....	20WM125
PA-20 135hp. and PA-22 135 hp. Owners Manual .....	20WM135
PA-22 150 hp. Owners Manual .....	22WM150
PA-22 108 hp. Owners Manual.....	22WM108
PA-22 108 hp. Flight Manual .....	22FM108
PA-22 125 hp. Flight Manual.....	22FM125
PA-22 160 hp. Flight Manual.....	22FM160
PA-20 Parts Manual, illustrated .....	20PM
PA-22 Series Parts Manual .....	22PM
Service Aids, Bulletins, Letters and Memos, PA-11 thru PA-22 .....	PBLPA
PA-22 Series Inspection Report .....	230-201
PA-22-108 Colt Inspection Report .....	230-206

**PC 149**

## Wings

<i>Description</i>	<i>Part No.</i>
Flap and Aileron Attach Pin (424-217).....	<b>PC 590</b> MS20392-3C41
Front Spar Splice Kit .....	750-736
Rear Spar Splice Kit .....	750-737
Fuel Tank Strap Felt .....	10016-017
Fuel Tank Strap Felt .....	10016-021
#2 Drag Strut Drag Wire Pull Fitting, Front .....	U10161-004
#3 Drag Strut Drag Wire Pull Fitting, Front .....	U10161-005

## Wings (continued)

<i>Description</i>	<i>Part No.</i>
Drag Wire Nipple, 6-40 threads, #3 Drag Strut .....	U10201-000
Drag Wire Nipple, #2 Drag Strut .....	U10211-000
Drag Wire Clevis, #3 Drag Strut, Rear .....	U10221-000
Upper Strut Cuff Fairing, PA-20 .....	U10225-000
Right Hand Upper Strut Cuff Fairing, PA-20 .....	U10225-001
Front Spar Butt Hinge Fitting .....	U10401-000
Right Hand Inboard Leading Edge, PA-22 and with auxiliary fuel system on Colt .....	U10630-005
Left Hand Inboard Leading Edge.....	U10630-008
Fuel Tank Cover Rear Support, PA-20 115 hp.....	10633-005
Fuel Tank Front Top Short Strap .....	U10648-003
Fuel Tank Rear Top Long Strap .....	U10649-003
Fuel Tank Inboard and Outboard Bottom Strap .....	U10650-002
Fuel Gauge Glass Tube, PA-20 (U10676-003) .....	U10852-000
Fuel Gauge Plug, PA-20 .....	U10676-004
Fuel Gauge Access Plate, PA-20 .....	U10878-000
Navigation Light Wire Clip .....	U11061-000
False Spar Reinforcement Plate, PA-22, SN 807 and up.....	11473-047
Wing Root Top Fairing .....	U11523-000
Right Hand Rear Bottom Wing Root Fairing, PA-22 SN 1-7642, 8000-8814, 8816, 8818, 8821 and 8822 .....	U11524-003
Left Hand Rear Bottom Wing Root Fairing, PA-22 (same SN's as above) .....	U11524-004
Left Hand Front Bottom Wing Root Fairing, PA-22, SN 1-806.....	U11525-000
Left Hand Front Bottom Wing Root Fairing, PA-22, SN 807 and up .....	U11525-002
Left Hand Leading Edge Wing Root Fairing.....	U11526-000
Right Hand Leading Edge Wing Root Fairing.....	U11526-001
Airspeed Bracket, Left Hand .....	U11580-000
Right Hand Front Bottom Wing Root Fairing, PA-22 SN 1-7642, 8000-8814, 8816, 8818, 8821 and 8822 .....	U11659-000
#4 Right Hand Rib Assembly, Tri-Pacer (11752-001) .....	U1225-03
Drag Wire Washer .....	11933-000
Butt Rib Leading Edge Attach Angle.....	12331-002
Tie Down Ring Assembly .....	U12345-004
Left Hand Inboard False Spar .....	U12463-000
Right Hand Inboard False Spar .....	U12463-001
Left Hand Center #2 False Spar, Tri-Pacer .....	U12473-000
Right Hand Center #2 False Spar, Tri-Pacer .....	U12473-001
Fairing Attach Plate .....	12537-000
<b>Fuel Tank Cover Assembly (12570-000) .....</b> <b>replaced by .....</b>	<b>U12570-009</b>

## WINGS (continued)

<i>Description</i>	<i>Part No.</i>
#2 Drag Strut Drag Wire Pull Fitting, Rear .....	U10171-004
#4 Drag Strut Drag Wire Pull Fitting, Front and Rear .....	U10171-005
Wing Navigation Light Bracket .....	U12560-000
Left Hand Lower Strut Fairing .....	U12969-000
Right Hand Lower Strut Fairing .....	U12969-001
Inspection Plate .....	U12761-002
or .....	<b>PC 399</b> 483-10
Left Hand Upper Front Strut Cuff, without tie-down ring .....	U12973-000
Right Hand Upper Front Strut Cuff, without tie-down ring .....	U12973-001
Right Hand Upper Front Strut Cuff, with tie-down ring .....	U12973-003
Left Hand Upper Front Strut Cuff, with tie-down ring .....	U12973-004
Left Hand Upper Rear Strut Cuff.....	U12974-000
Right Hand Upper Rear Strut Cuff .....	U12974-001
Outboard Leading Edge Skin .....	U13072-005
False Spar Attachment Gusset .....	U13171-000
Lift Strut Fork Bolt .....	U13241-000
Pitot and Static Tube Assembly, 135 hp. ....	U13764-000
Rear Spar Butt Hinge Fitting.....	U14161-000
#4 Drag Strut .....	U14222-000
#2 Drag Strut .....	U14222-002
#1 Drag Strut .....	U14232-002
#2 Drag Strut Front Spar Angle .....	U14401-003
#4 Drag Strut Front Spar Angle .....	U14401-005
Left Hand Center Leading Edge Cover, PA-22 SN 2378 and 2425 and up .....	U14405-000
Right Hand Center Leading Edge Cover, PA-22 SN 2378 and 2425 and up .....	U14405-001
#2 Drag Strut Rear Spar Angle.....	U14411-002
#4 Drag Strut Rear Spar Angle.....	U14411-004
Wing Lift Strut Fork, 7/16-inch .....	U14481-002
Pitot Tube Assembly, PA-22 SN 2378 and 2425 and up.....	14494-000

### Wing Leading Edge Skins FAA/PMA Approved

Left Hand Inboard .....	U10630-008
Right Hand Inboard .....	U10630-005
Right Hand Inboard .....	15137-000
Left Hand Center, SN 1-2425, except 2378 .....	U15482-005
Right Hand Center, SN 1-2425, except 2378 .....	U15482-004
Left Hand Center, PA-22, SN 2378 and 2425 and up .....	U14405-000
Right Hand Center, PA-22, SN 2378 and 2425 and up .....	U14405-001
Outboard Skin .....	U13072-005
Left Hand Wing Tip Skin .....	U15723-000
Right Hand Wing Tip Skin.....	U15723-001

### One-Piece, Stamped Aluminum Wing Ribs FAA/STC Approved for PA-20 and PA-22

For more information and application chart for individual ribs, replacement ribs, replacement ribs kits and entire wings, see pages 5-59 & 5-60.

# PIPER PA-20, PA-22

## Wing Assemblies, Uncovered for SN 2378 and 2425 and up

Left Hand Wing Assembly .....14407-000UR  
 Right Hand Wing Assembly .....14407-001UR  
 Wings are built with Univair's FAA/STC approved one-piece stamped aluminum wing ribs. These wings exclude fuel tanks, flaps and ailerons.

<i>Description</i>	<i>Part No.</i>
Aileron Horn Stop Assembly .....	U14581-005
Drag Wire Assembly .....	U14941-006
Drag Wire Assembly .....	U14941-007
Right Hand Inboard Leading Edge Cover, Colt .....	15137-000
Right Hand Center Leading Edge, PA-22 SN 1-2377 and 2379-2424 .....	U15482-004
Left Hand Center Leading Edge, PA-22 SN 1-2377 and 2379-2424 .....	U15482-005
#3 Left Hand Outboard False Spar .....	U15572-000
#3 Right Hand Outboard False Spar .....	U15572-001
Left Hand Leading Edge Wing Tip Cover .....	U15723-000
Right Hand Leading Edge Wing Tip Cover .....	U15723-001
Tip Bow Front Spar Rear Fitting .....	U16551-000
Tip Bow Front Spar Front Fitting .....	U16561-000
Wing Root Seal, 10-foot length .....	U19795-000
Rubber Lower Fairing Block .....	30831-002
Short Fairlead Segment .....	U40071-000
Fairlead Snap Ring .....	U40081-000
Long Fairlead Segment .....	U40701-000
Cable Pulley .....	U40991-000
Aileron Outboard Hinge .....	U41881-000
Flap Outboard Hinge .....	U41881-002
Leather Patch Reinforcement .....	U60863-003
Fuel Tank Strainer .....	U72091-000
Fuel Tank Filler Cap Flange .....	74181-000

## Spars - FAA/PMA Approved PA-20 Spar Assembly

Left Hand Front Spar .....	U11753-002
Right Hand Front Spar .....	U11753-007
Left Hand Rear Spar .....	U11754-007
Right Hand Rear Spar .....	U11754-008

## PA-22 Spar Assembly

Left Hand Rear, SN 1-2425, except 2378 .....	U11754-007
Right Hand Rear, SN 1-2425, except 2378 .....	U11754-008
Left Hand Rear, SN 2378 and 2425-7642 .....	U14399-002
Right Hand Rear, SN 2378 and 2425-7642 .....	U14399-003
Left Hand Rear, SN 8000 and up .....	U14399-006
Right Hand Rear, SN 8000 and up .....	U14399-007
Left Hand Front, SN 1-2425, except 2378 .....	U11753-002
Right Hand Front, SN 1-2425, except 2378 .....	U11753-007
Left Hand Front, SN 2378 and 2425 and up .....	U14398-002
Right Hand Front, SN 2378 and 2425 and up .....	U14398-003



## Ailerons, & Flaps Uncovered

(FAA/PMA Approved)

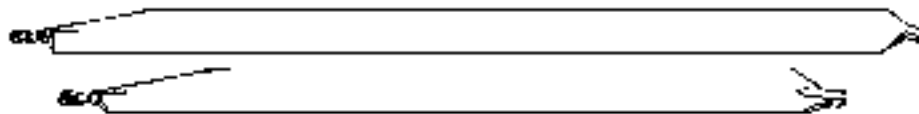
Left Hand Flap .....	U12469-000
Right Hand Flaps .....	U12469-001
Left Hand Aileron .....	U12468-000
Right Hand Aileron .....	U12468-001

## Stainless Steel FAA/PMA Approved Lift Strut Forks



1. New Heavy Duty 5/8 in. Heat Treated Fork, for use in sealed struts only .....U89201-003
  2. Original Rolled Thread 7/16 inch Fork.....U14481-003
- Univair has been manufacturing FAA/PMA approved High Strength, Heavy Duty Lift Strut Forks since 1975. Our Lift Strut Forks are made from heat treated Stainless steel with rolled threads, are magnafluxed and have always complied with AD 81-25-05 & AD99-01-05

## Eliminate Repetitive AD Inspections of Your Struts and Forks with Univair's New Oiled and Sealed Lift Struts! (FAA/PMA approved and comply with AD 99-01-05)



These struts includes the new heavy duty, heat treated, magnafluxed 5/8-inch rolled thread strut fork and nut.

Front Lift Strut .....	U85560-002
Rear Lift Strut .....	U85559-002

## Description *Part No.*

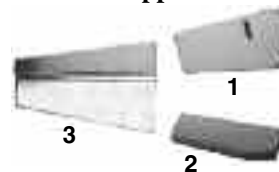
Spar Butt Hinge Bushing .....	80022-031
Fuel Tank Strap Stud .....	80111-000
Fuel Tank Strap Installation Washer .....	U80122-011
Flap Hinge Washer(U80122-016) .....	80122-086
Filler Neck Washer .....	U80122-048
Inspection Ring .....	U85012-078
or.....	<b>PC 399</b> 483-15
Drain Grommet .....	U80122-053
Hinge Pin Washer .....	80122-086
Drag Wire Washer .....	U81102-003
Pyralin Disc at wing tip .....	81232-015
Fuel Hose .....	U82371-010
Rectangular Inspection Cover .....	U82461-000
Airspeed Hose .....	U83161-002
Door Latch Kit .....	52745-000
Flap Attach Washer .....	85012-010
Strainer Gasket .....	U85012-032
Leather Reinforcement at Leading Edge .....	U85012-049

**For your Covering and Finishing needs, Univair carries a full line of quality distributor products, including Randolph, Poly-Fiber, Ceconite and Tempo. See the Paint, Dope and Fabric section in this catalog.**

## Flaps, Uncovered

Left Hand Flap .....	12469-000
Right Hand Flap .....	12469-001

## FAA/PMA Approved PA-22 Strut Cuffs



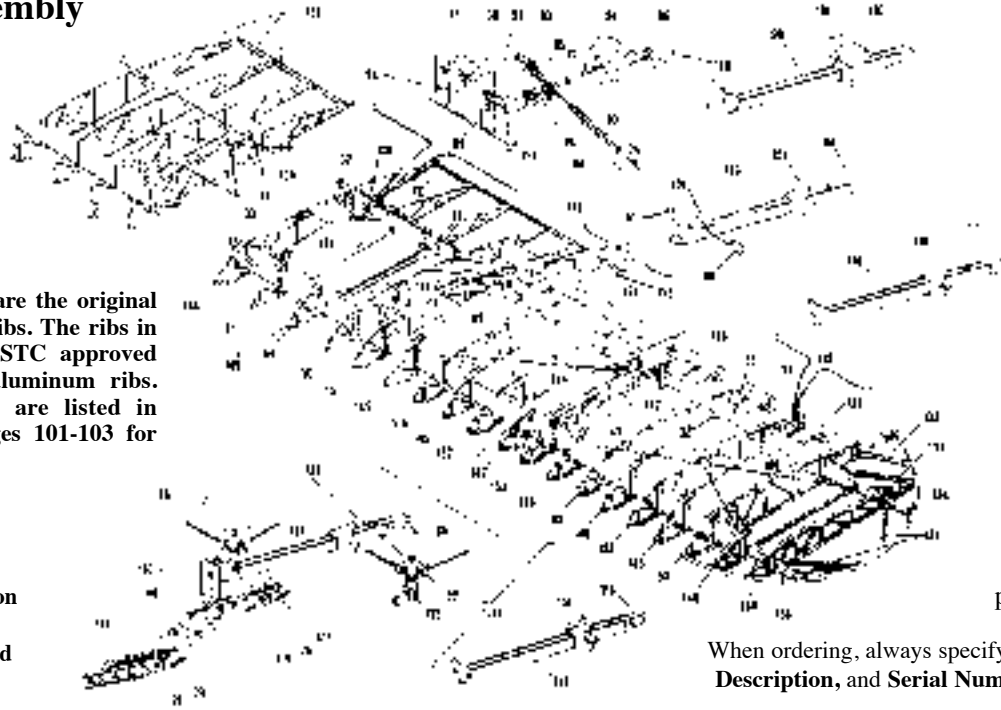
1. Upper Front Strut Cuff
  - Left w/Tie Down Fitting .....U12973-004
  - Left w/o Tie Down Fitting .....U12973-000
  - Right w/Tie Down Fitting .....U12973-003
  - Right w/o Tie Down Fitting .....U12973-001
2. Upper Rear Strut Cuff
  - Left .....U12974-000
  - Right) .....U12974-001
3. Lower Strut Cuff
  - Left .....U12969-000
  - Right .....U12969-001

**All items on this page are Price Code 150 unless otherwise noted**

Price and availability subject to change without notice. Univair's Toll Free Sales: 1-888-433-5433

# PIPER PA-20, PA-22

## Wing Panel Assembly



The ribs illustrated are the original "Truss type" Piper ribs. The ribs in our listing are our STC approved one-piece, formed aluminum ribs. Original Piper ribs are listed in parenthesis. See pages 101-103 for details.

NOTE: "U" prefixes on part numbers indicate an FAA/PMA approved part.

For crating charges see first page in price list.

When ordering, always specify **Part Number, Description, and Serial Number** of aircraft.

Figure No.	Part No.	Code	Description	No. Req'd.	SNs Affected
86	U11527-002		Cable Assembly, Aileron	4	
87	U14384-000	D	Flap Return Spring (11694-002)	2	.1 to 1377 and 2379 to 2424
88	U10940-000	D	Spring	2	.1 to 1377 and 2379 to 2424
	U14384-000	D	Flap Return Spring (487-328)		.2378 and 2425 to 7642
89	U11675-003	D	Angle, Rear Spar, #1 Flap Hinge Bracket	2	
90	U11675-002	D	Angle, Rear Spar, Flap Bellcrank Attachment	4	
91	U11672-000	D	Bracket, Flap Bellcrank Attachment	2	
92	U40092-010	D	Bellcrank, Flap, Left Hand	1	
	U40092-009	D	Bellcrank, Flap, Right Hand	1	
93	U81262-014	D	Link, Flap Cable Attachment, at Bellcrank	4	
94	U11677-000	D	Rod, Flap Control, Push-Pull	2	
95	.12713-004		Screw, Flap, Push-Pull Rod to Bellcrank		.1 to 806
	MS24694S63	D	Screw (410-050)		<b>PC 590</b> .807 to 7642
96	U452-335	D	Bearing, Flap Push-Pull Rod End	4	
98	U12474-002	D	Bracket, Flap Hinge, #1, Inboard	2	
99	U10912-006	D	Bracket, Hinge	1	
100	U10921-000	D	Block, Bearing	1	
101	U12476-000	D	Clamp	1	
102	U12474-000	D	Bracket, Flap Hinge, #2, Outboard	2	
103	U10912-006	D	Bracket, Hinge	1	
104	U10921-000	D	Block, Bearing	1	
105	U12056-002	D	Clamp Attachment, at False Spar	1	
106	U12467-000	D	Guide, Aileron Cable	1	
107	U40081-000		Ring, Fairlead Snap	4	
108	U40701-000		Fairlead, Aileron Cable, Split/Safety, less Ring	8	
109	U10291-000		Angle, Rear Spar at #2 Flap and Aileron Hinge Bracket	4	
110	U14401-007		Angle	2	
111	U10703-002		Bracket Assembly, Aileron Hinge, #1, Inboard	2	
112	U10912-008		Hinge, Bracket	1	
113	U10921-000		Block, Bearing	1	
114	U12056-002		Clamp Attachment, at False Spar	1	
115	U10703-000		Bracket Assembly, Aileron Hinge, #2, Outboard	2	
116	U10912-006		Bracket, Hinge	1	

Code D: 150 hp. Wing panels used on PA-22 airplanes with serial numbers 2600 and 2601.

# PIPER PA-20, PA-22

## Wing Panel Assembly (continued)

Figure No.	Part No.	Code	Description	No. Req'd.	SNs Affected
117	U10921-000		Block, Bearing	1	
118	U12056-002		Clamp Attachment, at False Spar	1	
119	U86102-054		Bushing, Upper Aileron Pulley Housing	2	
121	U41291-000		Housing Assembly, Aileron Pulley, Upper	2	
122	U12462-000		Housing Assembly, Aileron Pulley, Lower	2	
123	U40991-000		Pulley, Aileron Cable	4	
124	U14261-002		Fitting, Upper Aileron Pulley Housing Attachment	2	
125	U12466-000		Fitting, Lower Aileron Pulley Housing Attachment, Left Hand	1	
	U12466-001		Fitting, Lower Aileron Pulley Housing Attachment, Right Hand	1	
126	U11755-003		Fitting, Lift Strut, Rear Spar	4	
127	U11757-002		Block, Filler, Lift Strut Fitting, Rear Spar	4	
128	U11755-000		Fitting, Lift Strut, Front Spar	4	
129	U11757-000		Block, Filler, Lift Strut Fitting, Front Spar	4	
130	U12252-002		Brace, Channel, at #1 Rib, 8-1/2-inch	4	
131	U12252-003		Brace, Channel, 16-inch, #1, 4, 12 Rib and Bow to Spar, Tip End	1	1 to 2377 and 2379 to 2424
	U12252-003		Brace, Channel, 16-inch, #1, 4, 13 Rib and Bow to Spar, Tip End	16	2378 and 2425 and up
132	U12252-006		Brace, Channel, 6-1/4-inch, #4 and #1 Rib to Spar	6	
133	U12252-005		Brace, Channel, 11-inch, #11 Rib to Bow	1	1 to 2377 and 2379 to 2424
	U12252-005		Brace, Channel, 11-inch, #12 Rib to Bow	2	2378 and 2425 and up
134	U453-126		Bow, Wing Tip	2	
137	U14541-000	B, D	Brace Assembly, Aileron False Spar, #3 and #4 (#3, #4 and #5 on 150 and 160; #6 on 108 hp.)	4	
138	U14541-002	B	Brace Assembly, Aileron False Spar, #1 and #2	4	
139	U11678-000	C	Plate, Flap Bellcrank Stop	2	
140	U15631-002		Spacer, Lift Strut Fitting, Front Spar	2	
141	U15631-003		Spacer, Lift Strut Fitting, Rear Spar	2	
142	U16472-000		Tube, Brace, Lower "N" at Strut Point	2	
143	U11771-000		Tube, Brace, Diagonal "N" at Strut Point	2	
144	U16462-000		Tube, Brace, Upper "N" at Strut Point	2	
145	U1200-02	B, D	Rib Assembly, Nose (#14 on 150, 160 and 108 hp.) (15831-002)	10	
146	U1216-00		Rib Assembly, Wing Tip, Nose, Left Hand (16192-000)	1	
	U1216-01		Rib Assembly, Wing Tip, Nose, Right Hand (16192-001)	1	
147	U1200-05		Rib Assembly, Nose, Special, at Strut Fitting (15712-000)	2	
	U1200-05		Rib Assembly, Nose, Special, at Strut Fitting, 150, 160 and 108 hp. (15712-002)	2	
148	U1225-00	C	Rib Assembly, #1 Butt, Left Hand (12470-000)	1	
	U1225-01	C	Rib Assembly, #1 Butt, Right Hand (12470-001)	1	
	U1229-00	B	Rib Assembly, #1 Butt, Left Hand (10634-002)	1	
	U1229-01	A, B	Rib Assembly, #1 Butt, Right Hand (10634-009)	1	
149	U1226-00	C	Rib Assembly, #2 and #3, Left Hand and Right Hand (12472-000)	4	
150	U1225-02	C	Rib Assembly, #4, Left Hand (11752-000)	1	
	U1225-03	C	Rib Assembly, #4, Right Hand (11752-001)	1	
	U1229-02	B	Rib Assembly, #4, Left Hand (12046-010)	1	
	U1229-03	A	Rib Assembly, #4, Right Hand (12046-011)	1	
151	U1207-00	C	Rib Assembly, #5, Left Hand and Right Hand (12046-004)	2	
	U1218-00	B	Rib Assembly, #5, Left Hand and Right Hand (12825-000)	2	
151a	U1207-00		Rib Assembly, #6, Left Hand and Right Hand (12046-004)	2	
152	U1207-00	C	Rib Assembly, #7-10, Left Hand and Right Hand, (#7-11 on 150, 160 and 108 hp.) (12046-004)	8	
153	U1206-00	D	Rib Assembly, #11, Aileron, Outboard, Left Hand (#12 on 150, 160 and 108 hp.) (12046-007)	1	
	U1206-01	D	Rib Assembly, #11, Aileron, Outboard, Right Hand (#12 on 150, 160 and 108 hp.) (12046-008)	1	
154	U1202-00	D	Rib Assembly, #12, Tip, Left Hand (#13 on 150, 160 and 108 hp.) (10742-002)	1	
	U1202-01	D	Rib Assembly, #12, Tip, Right Hand (#13 on 150, 160 and 108 hp.) (10742-003)	1	
155	U11754-007		Spar Assembly, Wing, Rear, Left Hand	1	1 to 2377 and 2379 to 2424
	U11754-008		Spar Assembly, Wing, Rear, Right Hand	1	1 to 2377 and 2379 to 2424
	U14399-002		Spar Assembly, Wing, Rear, Left Hand	1	2378 and 2425 to 7642
	U14399-003		Spar Assembly, Wing, Rear, Right Hand	1	2378 and 2425 to 7642

Code A: Used on PA-22-108 hp. with auxiliary fuel system. Code B: Used on PA-22-108 hp. ONLY. Code C: NOT used on PA-22-108 hp. Code D: 150 hp. Wing panels used on PA-22 airplanes with serial numbers 2600 and 2601.

**All items on this page are Price Code 150 unless otherwise noted**

Price and availability subject to change without notice. Univair's Toll Free Sales: 1-888-433-5433

# PIPER PA-20, PA-22

## Wing Panel Assembly (continued)

Figure No.	Part No.	Code	Description	No. Req'd.	SNs Affected
155	U14399-006		Spar Assembly, Wing, Rear, Left Hand	1	.8000 and up
	U14399-007		Spar Assembly, Wing, Rear, Right Hand	1	.8000 and up
156	U11753-002		Spar Assembly, Wing, Front, Left Hand	1	.1 to 2377 and 2379 to 2424
	U11753-007		Spar Assembly, Wing, Front, Right Hand	1	.1 to 2377 and 2379 to 2424
	U14398-002		Spar Assembly, Wing, Front, Left Hand	1	.2378 and 2425 and up
	U14398-003		Spar Assembly, Wing, Front, Right Hand	1	.2378 and 2425 and up
157	.80122-007	C	Washer, Flap Push-Pull Rod Attachment at Bellcrank	4	
158	U1228-05	B	Rib Assembly, #2, #3 and #4 Right Hand Wing Only, used with no auxiliary fuel tank (12046-002)	3	
159	15131-000	B	Rib Assembly, Aileron, Inboard, Left Hand	1	
	15131-001	B	Rib Assembly, Aileron, Outboard, Right Hand	1	
160	U12252-008	B	Channel, Brace	1	
161	U1224-00	A, B	Rib Assembly (10635-000)	1	
162	U12252-003	B	Channel, Brace	1	
163	.12820-003	B	Trailing Edge Assembly	1	
164	U1224-00	A, B	Rib Assembly (10635-003)	1	

Code A: Used on PA-22 108 hp. with auxiliary fuel system.      Code B: Used on PA-22 108 hp. ONLY.      Code C: NOT used on PA-22 108 hp.

## Fuselage

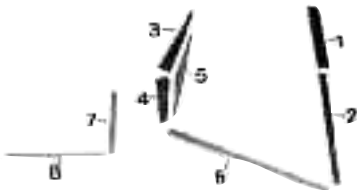
### Window and Door Structural Channel Kit

Includes all the 4130 steel channel pieces shown below for both right and left sides of aircraft.  
Some final trimming may be required for finishing fit.

Part Number .....819-22

### Window and Door Structural Channels for PA-22 (to comply with Piper Bulletin #819)

#### RIGHT SIDE



#### LEFT SIDE

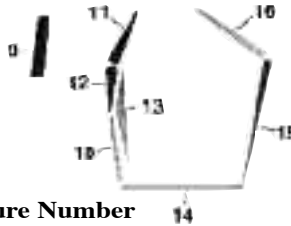
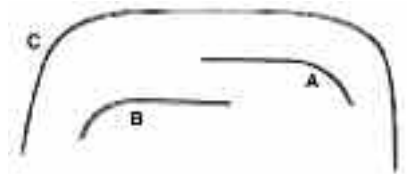


Figure Number	Part No.	Figure Number	Part No.
1	819-22-01	9	819-22-06
2	819-22-02	10	819-22-07B
3	819-22-04T	11	819-22-07T
4	819-22-04B	12	819-22-07H
5	819-22-04C	13	819-22-07C
6	819-22-05D	14	819-22-08D
7	819-22-05G	15	819-22-09
8	819-22-08G	16	819-22-10

## Fuselage (continued)

### Firewall Moulding



- A. Left Hand Lower Moulding....U14972-000
- B. Right Hand Lower Moulding .U14972-001
- C. Upper Moulding .....U14973-000

Description	Part No.
Rear of Fuselage Cowl Fairing, PA-22.13143-000	
Firewall Assembly Bottom Panel ....13149-000	
Static Vent Line Attach Plate Assembly, PA-22, SN 2378 and 2425 and up 14495-000	
Fuselage Upper Engine Mount Fitting .20291-000	
Fuselage Lower Engine Mount Fitting .20301-000	
Tailwheel Spring Attach Fitting, PA-20, SN 763 and up (20611-002).....L1027-02	
Tail Skid Front U Fitting .....U20631-000	
Landing Gear Fittings, L/H.....U21262-004 R/H.....U21262-005	
Tail Post Assembly .....U22412-000	
Tail Inspection, Left Hand Panel .U60742-000	
Tail Inspection, Right Hand Panel.U60742-001	
Leather Reinforcement Patch .....U60863-003	
Reinforcement Grommet .....80122-051	
Drain Grommet .....U80122-053	
Rear Seat Clip Reinforcement Grommet.....80122-056	
Rectangular Insp. Cover Grommet ....U80541-002	
Rectangular Inspection Cover .....U82461-000	
Airspeed Hose.....U83161-002	

### Door Hinge



- A. Front Door Hinge (on door)..... MS35822-15D-18
- B. Baggage Door Hinge.....22BD
- C. Front Door Hinge (on fuselage) ..... MS35822-13D-20

**PC590**

Description	Part No.
1/4-in. Steel U Channel, 6-ft. (750-284).....X141472	
3/8-in. Steel U Channel, 6-ft. ....U750-285	
Stabilizer Yoke Insp. Plate Grommet.....U10292-000	
Tail Inspection Panel Grommet.....U10293-000	

Description	Part No.
Idle Adjuster Oblong Grommet ....U10984-000	
Vertical Fin.....U11783-000	
Fuselage Left Hand Wing Rear Hinge Fitting.....U11821-000	
Fuselage Right Hand Wing Rear Hinge Fitting.....U11821-001	
Stabilizer Yoke Left Hand Inspection Cover.....U11990-000	
Stabilizer Yoke RH Insp. Cover .....U11990-001	
Fuselage Cowl Bottom Cup Fairing ....U12622-000	
Door Latch Plate.....13012-000	
Triangular Bottom Left Hand Fairing, inside gear .....13140-002	
Triangular Bottom Right Hand Fairing, inside gear .....13140-004	

# PIPER PA-20, PA-22

## Cockpit and Interior

<i>Description</i>	<i>Part No.</i>
Oil Pressure/Temperature Gauge .....	U450-680
Vacuum Line Fitting (451-857) <b>PC 580</b>	AN840-4D
Windshield Support Bumper, PA-22, SN 1-353 .....	U453-640
Tube Clip (454-888) .....	<b>PC 580</b> AN415-2
Hose Clamp .....	454-903
Vacuum Hose .....	455-149
Vacuum Line Elbow (458-893) <b>PC 580</b>	AN822-3D
Vacuum Line Elbow (458-903) .....	AN842-4
Vacuum Line Elbow (458-918) .....	AN914-3D
Vacuum Line Connector (460-649) <b>PC 525</b>	234X4
Suction Valve Plug (460-669) .....	<b>PC 525</b> 3152X2
Throttle Knob, black (471-049).....	U10911-000
Door Knob, ivory .....	471-051
Control Knob, red .....	471-053
Control Knob, ivory .....	471-059
Control Knob, black .....	471-060
Front Seat Stop Control Knob .....	471-063
Nipple (476-659) .....	<b>PC 525</b> 3326X6
Tach Shaft, non-recording (486-565) ..	TACH-34NR
Tach Shaft, recording (486-570) <b>PC 635</b>	U1713-R325
Seat Frame Spring, 19-1/2 inches .....	487-274
Vacuum Check Valve .....	492-029
Window Ventilator Kit .....	U752-287
Front Seat Stop Plunger, PA-22, SN 3218 and 3387 and up .....	12032-002
Baggage Strap, Buckle End, PA-22, SN 1-806 .....	12036-002
Baggage Strap, Tip End .....	12036-003
Rear Floorboard, PA-22, SN 807-7642 .....	U12555-002
Throttle Control, PA-22 (12693-004).....	U455-139-004
Recording Tachometer Attach Plate, PA-22, SN 1-353 .....	12828-000
Glove Compartment Door, PA-22, SN 1-806 .....	12979-000
Airspeed Tube .....	13541-004
Window Hinge .....	13848-000
Door Moulding .....	13945-019
Vacuum Pump Discharge Line .....	14047-000
Defroster Air Bottom Inlet Tube, PA-22, SN 807 and up .....	14148-000
Defroster Air Top Outlet Tube, PA-22, SN 807 and up .....	14149-000
Suction Regulating Valve .....	14205-000
Vacuum Line Elbow .....	14345-000
2-inch Adapter .....	14404-000
Door Latch Assembly, PA-22, SN 3218 and 3387 and up .....	14636-00

### PA-22 Instrument Panel Modification

**STC SA00428SE upgrades the panel to use modern 3 1/8" instruments. The modification has provisions for (7) 3 1/8" instruments and (1) 2 1/4" instrument. Form 337 required after installation. The installation of new 3 1/8" instruments is not a part of this STC and will require a separate Form 337.**

Kit for PA-22-150/160 .....

Kit For PA-22-108 Colt .....

**For full description, see listing pg. 5-66 in the Piper STC section.**

## Cockpit and Interior (continued)

<i>Description</i>	<i>Part No.</i>
Flex Connecting Hose .....	U15216-000
Control Cable Assy. (excludes knob) U16775-000	
Door Latch Kit .....	52745-000
Latch Rod Washer .....	80122-005
Door Handle Spacer Washer, PA-20 .....	U81342-020
Access Panel Attach Washer .....	81342-074
Door Handle Attach Pin .....	81761-011
Manifold Tube Assembly .....	82332-026
Vacuum Hose .....	82371-006
Vacuum Pump to Oil Separator Hose .....	82371-025
Vacuum Hose .....	U82371-033
Airspeed Hose .....	U83161-002
Defroster Flex Tube, PA-22, SN 807 and up .....	85052-016

## Controls

<i>Description</i>	<i>Part No.</i>
Pulley Shaft Bearing .....	452-340
Control Column Bearing .....	452-342
Roller Chain to Turnbuckle Couple Link, PA-22, SN 354 and up .....	472-684
Interconnecting Cable Tension Spring, PA-22 .....	487-291
Stabilizer Adjustment Crank Pulley, PA-20 .....	U10080-000
Flap Cable Return Spring .....	U10940-002
1-1/8-inch Cable Pulley, PA-22 .....	U11200-000
Stabilizer Adj. Cable Bracket .....	U11692-005
Flap Lever Pawl .....	U11700-000
Stabilizer Indicator Cover Plate .....	U12102-000
Stabilizer Adjustment Crank Pin .....	U12105-000
Control Wheel Left Hand Sprocket Shaft, PA-22, SN 354 and up .....	12520-005
Stabilizer Adj. Crank Pulley .....	U12983-000
Flap Lever, less plunger mechanism .....	U13184-000
Flap Control Lever .....	U13185-000

## Control Cables-FAA/PMA Approved



### Description

	<i>Galvanized Steel</i>	<i>Stainless Steel</i>
Aileron Balance, in top deck .....	U40123-069	U40123-069S
Aileron Control, in wing .....	U11527-002	U11527-004
Elevator to Lower Horn .....	U40123-068	U40123-068S
Elevator to Upper Horn .....	U40123-067	U40123-067S
Stabilizer Adjustment Cable .....	U41671-016	U41671-018
Right Hand Rudder Cable, PA-22, SN 3218 and 3398-7642 .....	U13109-010	U13109-018
Left Hand Rudder Cable, PA-22, SN 3218 and 3398-7642 .....	U13109-012	U13109-019
Upper Flap Cable, PA-22 1953-54 and PA-22 SN 807 and up .....	U12515-003	U12515-004
Elevator Bungee Upper Cable .....	U40123-061	U40123-061S
Elevator Bungee Lower Cable .....	U40123-070	U40123-070S
Aileron/Rudder Interconnecting Cable, PA-22, SN 807-7642 .....	U13108-002	U13108-011
Piper Special Fork .....	U461-132	

*All parts listed are for both the PA-20 and PA-22, unless otherwise specified.*

## Cockpit and Interior (continued)

<i>Description</i>	<i>Part No.</i>
Flap Control Plunger .....	U13203-000
Control Column Assembly, PA-22, SN 354 and up .....	13438-000
Lower Rear Sprocket, 15 teeth .....	13439-003
Upper Left Hand Sprocket, 12 teeth .....	13440-000
Control Column Chain Turnbuckle Barrel, PA-22 .....	13676-000
Short Fairlead Segment .....	U40071-000
Fairlead Snap Ring .....	U40081-000
Stabilizer Yoke Idler Assembly, PA-20 .....	U40651-000
Long Fairlead Segment .....	U40701-000
Cable Pulley .....	U40991-000
Stabilizer Adjustment Crank Escutcheon .....	U41101-000
Stabilizer Adjustment Crank (41111-000).....	U41111-002
Stabilizer Adjustment Crank Escutcheon Spring .....	U41151-000
Rudder Pedal Return Spring .....	U42891-000
Cable Fairlead .....	U42911-000
Flap Lever Spring .....	50111-000
Insert Bushing .....	U80012-004
Insert Bushing .....	80022-067
Pulley Washer .....	U80122-018
Rudder Pedal Bar Clamp .....	80222-023
1 3/4-inch Cable Pulley .....	U80421-000
Stabilizer Idler Yoke Attach Link, PA-20 .....	U81322-003
Aileron Cable Pulley Attach Washer .....	81342-011
Spacer Washer, PA-22 .....	81342-042
Stabilizer Adj. Tension Spring .....	U81411-002
Stabilizer Adjustment Crank Pulley Lock Pin .....	U81761-004
Rudder Pedal Torque Tube Spacer, .010 inch to .014 inch .....	85012-004
Rudder Pedal Torque Tube Spacer, .015 inch to .020 inch .....	85012-005

### PA-20 & PA-22 Throttle Cables FAA/PMA Approved

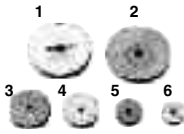
Throttle Cable (less Knob).....U455-139-000  
Throttle Cable (with knob).....U455-139-004

**All items on this page are Price Code 150 unless otherwise noted**

Price and availability subject to change without notice. Univair's Toll Free Sales: 1-888-433-5433

# PIPER PA-20, PA-22

## Controls (continued)



### Piper Pulleys FAA/PMA Approved

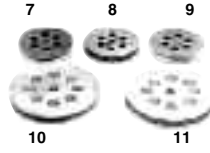


Fig.	Part Number	Description	O. Diam.	I. Diam.
1	U41171-000	Pulley, trimcrank with bushing (fiber)	2-3/4 in.	3/8 in.
1a	U40991-000	Pulley (no slot)	2-3/4 in.	3/8 in.
2	U41001-008	Pulley, with bearing (fiber) (41001-010)	2-3/4 in.	5/16 in.
3	U80421-000	Pulley (fiber)	1-3/4 in.	1/4 in.
4	U481-609	Pulley (fiber)	1-1/2 in.	1/4 in.
5	U11200-000	Pulley (fiber)	1-1/8 in.	1/4 in.
6	U43001-000	Pulley (fiber)	1 in.	1/4 in.
7	U43061-000	Pulley, stabilizer screw (aluminum)	2-3/4 in.	3/8 in.
8	U12983-000	Pulley, double groove (aluminum)	2-3/4 in.	3/8 in.
9	U10080-000	Pulley, trimcrank (aluminum)	2-3/4 in.	3/8 in.
10	U11008-000	Pulley, adjustment screw (aluminum), single groove	4 in.	3/8 in.
11	U12982-000	Pulley, adjustment screw (aluminum), double groove	4 in.	3/8 in.

### Common Piper Grommets

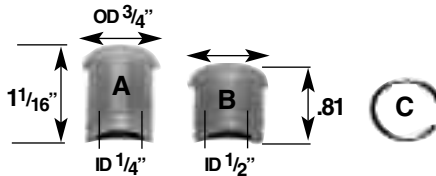
For a complete listing and pictures, please see page 5-4 in the Piper J-3 section of this catalog.

### FAA/PMA Approved Liner Tubes



Link Assembly Liner Tube (80132-011)	U86062-080
Rear Liner Tube (80132-010)	U86062-079

### FAA/PMA Approved Fairleads



A. Long Fairlead Segment	U40701-000
B. Short Fairlead Segment	U40071-000
C. Snap Ring	U40081-000

Each segment sold separately.

### Stabilizer Yoke and Adjustment Screw FAA/PMA Approved



Yoke	U42692-000
Adjustment Screw	U42961-102

Description	Part No.
Rudder Pedal Torque Tube Spacer, .032 inch (85012-006)	<b>PC 580</b> AN940-10
Control Column Shaft Attach Shim	85012-058
Control Column Shaft Attach Shim	85012-059
Stabilizer Rear Liner Tube	U86062-079
Stabilizer Link Assembly Liner	U86062-080
Insert Bushing, PA-20	86102-043
Insert Bushing (86102-064)	<b>PC 180</b> 8611000
Tie Rod Attach Pin (424-174)	<b>PC 590</b> MS20392-2C11

### Strobe Light Bracket



Can be used on the top of Piper rudders.  
FAA Field Approval Required  
Strobe Light Bracket ..... U15722-002

### Tail Surfaces

Description	Part No.
Tail Surface Attach Pin (424-224)	<b>PC 590</b> MS20392-3C55
Upper Tail Brace Wire (10074-002)	U10555-002
Lower Tail Brace Wire (10074-003)	U10556-002
Tie Rod Attach at Fin Fitting	U10075-002
Lower Brace Tie Rod Fitting for streamline type wire	U10075-003
Bottom Tie Rod Attach Fitting at stabilizer	U10075-004
Elevator Horn Upper Link	U10449-000
Bungee Cable Spring	U10940-002
Tail Light Wire Assembly	12177-039
Crank Assembly, Stabilizer Adjustment (41111-000)	U41111-002
Washer	U40131-000
Tail Brace Wire Bottom Clevis (40521-007)	U61341-002
Tail Brace Wire Top Clevis (40521-008)	U61341-003
Tail Brace Wire Top Clevis (40521-009)	U61341-004

## Tail Surfaces (continued)

Description	Part No.
Tail Brace Wire Top Clevis (40531-000)	U61340-000
Long Tail Bushing	U80022-044
Short Tail Bushing	U80022-045
Hinge Pin Washer	U80122-086
Tie Rod Attach Bushing, PA-22, SN 8000 and up	U82732-072
Rudder Attach Hardware Kit	PSK-1
Elevator Attach Hardware Kit	PSK-2

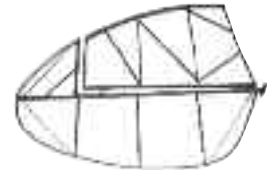
### Tail Brace Wires — FAA/PMA Approved

(Round type complies with AD 60-01-07.)



Upper Wire Assembly	U10555-002
Lower Wire Assembly	U10556-002
Hardware Kit for first time round wires are installed	10555-KIT

### FAA/PMA Approved Tail Surfaces (uncovered)



LH or RH Elevator	U12649-000
LH or RH Stabilizer	U12647-000
Rudder	U40622-007
Fin	U11783-000

### Fuel System

Description	Part No.
Fuel Valve	U491-947K2
Fuel Valve Handle	U61964-100
Fuel Line Grommet (434-134)	
Fuel Gauge Sender	<b>PC 590</b> MS35489-11
Sender Gasket, AC Type	U450-663
Fuel Gauge Receiver (450-664)	462-021
Fuel Line Elbow (458-920)	<b>PC 180</b> 3090-033
Primer Line Tee (460-652)	<b>PC 525</b> 3400X2
Fuel Line Elbow (460-654)	702X2
Fuel Line Elbow (460-659)	402X6
Fuel Line Elbow (460-661)	352X6
Fuel Line Elbow (460-666)	3400X4
Drain Plug (460-670)	3152X6
Fuel Line Elbow (460-689)	450X6
Jet Primer (468-340)	U31197-000
Fuel Line Union (491-072)	<b>PC 525</b> 300X6
Strainer Bail Wire Assembly	U494-644
Fuel Strainer Screen	U750-272
Fuel Valve Washer	756-645

# PIPER PA-20, PA-22

## Fuel System (continued) PA-20 and PA-22 Fuel Tanks



- Left Hand Fuel Tank, original  
(reconditioned).....10849-034REC
- Right Hand Fuel Tank, original  
(reconditioned).....10849-033REC
- FAA/PMA Approved Fuel Cap  
(eliminates requirements  
of AD 59-10-08) .....U60750-002
- Fuel Cap Gasket .....U60750-006
- Fuel Tank Cover .....U12570-009

## Complete Piper Gascolator FAA/PMA Approved

**Metal Bowl  
with quick drain**



- Piper Gascolator .....U14330-002

<i>Description</i>	<i>Part No.</i>
Primer Line at Left Hand Front Cylinder, PA-22, SN 1-1759.....	10143-020
Primer Line at Left Hand Rear Cylinder, PA-22, SN 1-1759.....	10143-061
Primer Line to Gascolator.....	10143-065
Primer Line at Left Hand Front Cylinder, PA-22, SN 2378 and 2425 and up..	10143-091
Fuel Gauge Glass Tube, PA-20 (10676-003) .....	U10852-000
Fuel Gauge Plug, PA-20 .....	U10676-004
Primer Line Assembly .....	11987-009
Primer Line Assembly .....	11987-057
Primer Line Assembly .....	11987-061
Fuel Strainer Bowl with EZ Drain..	U12764-000
Fuel Line, right hand tank to strainer, Colt .....	U12862-005
Fuel Line, R H Tank to Strainer .....	U12864-000
Primer Line Tee Attach Bracket .....	12870-000
Fuel Line Assembly, Tank to Pump, PA-22, SN 534 and up .....	U14412-003
Fuel Strainer Cover, PA-22, SN 2378 and 2425 and up (14428-000)	U87477-002
Primer Tee Mounting Bracket, PA-22, SN 2378 and 2425 and up .....	U14470-000

## Fuel System (continued) Electric Fuel Gauge and Sender



- Fuel Gauge Sender.....U450-663
- Sender Gasket.....50-716
- Sender Gasket (for original AC Type senders)...
- 462-021
- Fuel Gauge Receiver ..... **PC 180** 3090-033

<i>Description</i>	<i>Part No.</i>
Tank Strainer, Bottom, PA-22, SN 534 and up .....	14545-000
Fuel Line Assembly .....	U14605-000
Fuel Line Assembly, PA-22, SN 8000-9000 .....	U14796-000
Flex Fuel Line Strainer to Carburetor .....	U17766-066
Primer Line Attach Clamp, PA-22, SN 2378 and 2425 and up .....	18307-000
Fuel Strainer Mounting Bracket Assembly .....	U71991-000
Fuel Strainer .....	U72091-000
Primer Line Attach Clamp .....	U80032-069
Fuel Pump Channel Attach Clamp ...	80032-075
Auxiliary Tank Front Left Hand Installation Clamp .....	80032-076
Filler Neck Washer .....	U80122-048
Fuel Hose .....	U82371-010
Fuel Gauge Gasket, 1950 PA-20 Sender .....	U85012-053

**Fuel Drain Valve, FAA/PMA  
Approved.....**PC 560** F391-14**

## Gas Cap Gasket-FAA/PMA Approved



- Gas Cap Gasket.....U60750-006

## Chassis and Landing Gear

<i>Description</i>	<i>Part No.</i>
Nose Gear Seal Kit.....	PSK-3
Nose Wheel Wiper Strip .....	187-625
Wheel and Drum Assembly, PA-20 (451-760).....	<b>PC 670</b> D3-13A-1
Brake Bleeder Tee, PA-20 (451-771) .....	<b>PC 670</b> B57-239
Nose Wheel Main Upper Oleo Bearing (452-419).....	<b>PC 599</b> B545DD
Hydrasorb Unit .....	U487-558-1
Nose Gear Outside Bearing Tube O-Ring (462-050) .....	<b>PC 590</b> MS28775-224
Nose Gear Bearing Tube Retainer Ring	484-705

## Chassis and Landing Gear (continued) Nose Gear Steering Rods FAA/PMA Approved

- For SN 1 thru 3387 .....
- U13107-000
- For SN 3388 and up .....
- U14679-000

## Tailwheel Spring Set for PA-20-135 FAA/PMA Approved



- PA-20-135 Tailwheel Spg. ....
- PA20TWS135

<i>Description</i>	<i>Part No.</i>
Nose Gear Top Inner Lower Tube Snap Ring .....	484-720
Anchor Pin, PA-20 (750-006).....	<b>PC 670</b> A20-54
Felt Retainer Washer, PA-20 (750-010).....	<b>PC 670</b> A56-4
Side Lock Ring, PA-20 (750-025).....	<b>PC 670</b> A85-118
Felt Retainer Lock Ring, PA-20 (750-026) .....	<b>PC 670</b> A85-218
Cone Bearing, PA-20 (750-063).....	<b>PC 570</b> 08125
Bearing Cup, PA-20 (750-064).....	<b>PC 570</b> 08231
Grease Retainer Felt, PA-20 (750-065) .....	<b>PC 670</b> B227-52
Tailwheel Bronze Bushing (750-722) .....	<b>PC 690</b> 1800
Tailwheel Steering Arm (750-744) .....	1709
Tailwheel Fork Assembly (750-748) .....	2078
Inside Grease Retainer, PA-20 (750-749) .....	1863
Tailwheel Hub (750-752).....	1967
Tailwheel Cone Bearing (751-489).....	<b>PC 570</b> 13889

## Goodrich Brake Assembly Parts for all Pipers with 8.00 x 4 wheels



While Supply Lasts!

- Brake Block (750-033) .....
  - B27-59-1
  - Spring (750-029) .....
  - B21-35
  - Shield (750-893) .....
  - A72-30
- For more details, see the Goodrich D3-13A-1  
assembly in the Tires, Wheels and Brakes  
section of this catalog. **PC 670****

**All parts listed are for both the PA-20  
and the PA-22, unless otherwise specified.**

**All items on this page are Price Code 150 unless otherwise noted**

Price and availability subject to change without notice. Univair's Toll Free Sales: 1-888-433-5433

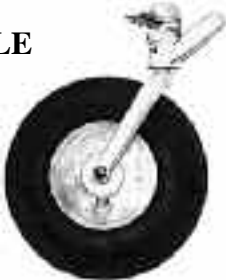
# PIPER PA-20, PA-22

## Chassis and Landing Gear (continued)

Description	Part No.
Hub Cap, PA-22 (751-490) ..... <b>PC 660</b>	158-01000
Dust Cap, PA-22 (751-491) .....	157-00200
Brake Drum, PA-22 (751-673) .....	169-00101
Inner Wheel Half, PA-22 (753-131) .....	161-00600
Inner Wheel Half, Disc Type Wheels, PA-22 (753-176) .....	161-01600
Brake Disc Assy., PA-22 (754-518) .....	164-00500
Horn Attachment Cap Screw .....	10836-002
Shimmy Dampener Eye-bolt, PA-22 ....	U11601-002
Bottom Tailwheel Spring.....	U12567-002
Middle Tailwheel Spring.....	U12567-003
Tailwheel Spring, 115-125 HP.....	U12567-004
Tailwheel Spring, 135 hp. ....	U12567-005
Shock Strut Top End Fitting .....	U12639-000
Shock Strut Bottom End Fitting .....	U12875-000
Axle Nut .....	U13020-000
Landing Gear Rear Leg Fairing, Right Hand or Left Hand, PA-20.....	U13053-000
Nose Strut Outer Upper Tube Assy.....	13069-000
Nose Gear Torque Tube Upper Link Assembly (13074-002).....	13074-802
Nose Gear Torque Tube Lower Link Assembly.....	13074-003

## Tailwheel Assemblies

### MAULE



Pneumatic Assembly .....TW-SFS-P8A-1-4

**PC 695**

### FAA/PMA 3200 Tailwheel

FAA/PMA 3200  
Tailwheel  
&  
Tailwheel Parts  
Available



FAA/PMA 3200 Series Tailwheel..... 3200

**PC 690**

**If there is an item you need but can't find,  
contact us! 303-375-8882**

## Chassis and Landing Gear (continued)

### PA-20 & 22 Landing Gear-FAA/PMA Approved



PA-20 Left Hand, Uncovered .....	L13189-000
PA-20 Right Hand, Uncovered .....	L13189-001
PA-22 Left Hand, Uncovered (SN 1-7642, 8000-8269, 8271-8288, 8290, 8292, 8294-8297, 8299-8303, 8306, 8308-8333, 8335-8454 and 8456).....	U13016-000
PA-22, Right Hand, Uncovered (SN 1-7642, 8000-8269, 8271-8288, 8290, 8292, 8294-8297, 8299-8303, 8306, 8308-8317, 8319-8333, 8335-8454 and 8456) .....	U13016-021

### Special Landing Gears for PA-20 (Wide Gear), Uncovered

Part No.	Wheel & Brake Application
L1012-00 .....	Left .....
L1012-01 .....	Right .....
L1012-40 .....	Left .....
L1012-41 .....	Right .....

STC Installation Approval STC-SA12RM

These gears are based on the PA-20 Wide Gear and have 1 1/2 inch axles designed to accommodate the use of wheel and brake arrangements other than the original Goodrich on the PA-20. These gears require STC SA12RM for installation (STC must be purchased with gears.)

### Cleveland Heavy Duty Wheel & Brake Conversion Kit For PA-20



For use with the above L1012 Series Landing gears using 1 1/2" axles. STC Approved  
Wheel & Brake Conversion Kit .....199-23100\*  
(Must have STC Installation)

**PC 660**

The following axle spacers will be required for proper installation - sold separately

For use with L1012-00 & 01 Landing Gears	
2 each I.B. Spacers .....	<b>PC 150</b> U1105-06
2 each O.B. Spacers .....	<b>PC 150</b> U1105-07

For use with L1012-40 & 41 Landing Gears	
2 each I.B. Spacers .....	<b>PC 150</b> U1105-06
2 each O.B. Spacers .....	<b>PC 150</b> U1105-09
*6.00 & 7.00X6 Tires Only	

### Grove 800 x 4 Disk Brake Conversion (Goodrich wheels and brakes only)

New FAA/PMA  
Approved Disc Brake  
Conversion



- Maintain your classic look
  - Use your existing wheels, tires and tubes
  - Use your existing master cylinder and brake lines
  - Easy Installation - all parts & special tools included
- Grove Brake Conversion.....76000

### Description

### Part No.

Nose Wheel Axle Rod .....	13089-000
Nose Wheel Axle Cap.....	13090-000
Brake Line On Gear Vee.....	U13104-000
Nose Wheel Steering Rod, PA-22, SN 1-3386 except 2560-2562 and 3218 .....	U13107-000
Nose Gear Bumper Block .....	13114-000
Nose Gear Bumper Block Bracket ....	13115-000
Landing Gear Vee, Rear Leg Trailing Edge, PA-22 .....	U13123-000
Nose Gear Control Rod Trim Plate ...	13133-000
Nose Gear Control Rod Seal Ring Housing.....	13134-000
Landing Gear L/H Outer Fairing.....	U13150-000
R/H .....	U13150-001
Landing Gear Right Hand Scuff Plate, PA-22, SN 354-4459 .....	13749-000
Nose Wheel Steering Rod, SN 3218 and 3387 and up .....	U14679-000
Nose Gear Steering Equalizer Clamp..	U14929-003
Axle Nut, PA-20, 1 1/4" .....	U30491-000
Tailwheel Top Pad.....	U30541-002
Hub Cap, PA-20 .....	U31702-000
Nose Gear Bronze Insert Bushing ....	80022-047
Landing Gear Insert Bushing.....	U80022-063
Tailwheel Bolt Spacer Washer .....	U85012-048
Shock Strut Bumper Washer.....	U85012-057
Nose Wheel Control Rod Seal Ring ..	85012-071
Nose Wheel Upper Bearing Seal ....	U85012-072
Nose Gear Air Valve Gasket.....	85012-091
Steering Horn Stop.....	U85061-000
Nose Wheel Axle Tube .....	U86062-056
Nose Wheel Spacer used with 38501 wheel.....	U86062-057

**All parts listed are for both the PA-20 and  
the PA-22, unless otherwise specified.**

# PIPER PA-20, PA-22

## Chassis and Landing Gear (continued)

### Axle Nut

For Gears with 1 1/2 inch axles  
(not for use with slotted axles)



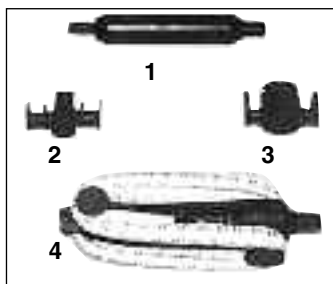
Axle Nut ..... **PC 590**.. MS21025-24  
Axle Nut for slotted axles. **PC 150**..13020-000

## Shock Cords



See page 15-15 for Product Information

## Shock Strut Assembly



1. Hydrasorb Unit.....U487-558-1
2. Shock Strut Top Fitting .....U12639-000
3. Shock Strut Lower Fitting .....U12875-000
4. Complete Hydrasorb Unit .....U13148-000

## Brakes

<i>Description</i>	<i>Part No.</i>
Goodrich Brake Assy., PA-20 (451-702) .....	<b>PC 670</b> .. D2-113
Cleveland Brake Assembly, PA-22 (451-708) .....	<b>PC 660</b> 030-00200
Cylinder Nipple O-Ring (484-700) .....	<b>PC 580</b> AN6227-5
Brake Nozzle Packing, PA-20 (750-016) .....	<b>PC 670</b> .. A64-3
Brake Shoe Retracting Spg., PA-20 (750-029) .....	B21-35
Brake Block, PA-20 (750-033) .....	B27-59-1
Brake Inner Fairing, PA-20 (750-035) .....	B51-72
Brake Frame, PA-20 (750-039) .....	D12-101
Brake Frame Flange, PA-20 (750-041) .....	D15-25
Brake Cylinder Piston (750-295) .....	<b>PC 690</b> ..1383
Master Cylinder Vent Gasket (750-379) .....	1159
Master Cylinder Diaphragm (2844) .....	U750-384

## Brakes (continued)

<i>Description</i>	<i>Part No.</i>
Master Cylinder Spring (750-386) .....	<b>PC 690</b> 1256
Expander Tube Shield, PA-20 (750-893) .....	<b>PC 670</b> A72-30
Brake Pedal Bushing (750-997) .....	<b>PC 690</b> 1494
Brake Pedal (750-999) .....	<b>PC 690</b> 1714
Right Hand Brake Shoe, PA-22 (751-378) .....	<b>PC 660</b> 172-00101
Left Hand Brake Shoe, PA-22 (751-379) .....	172-00102
Bleeder Valve Body, PA-22 (751-380) .....	087-00100
Cylinder Assembly, PA-22 (751-488) .....	091-00300
Brake Adjuster Eccentric, Left Hand, PA-22 (751-675) .....	097-00101
Brake Adjuster Eccentric, Right Hand, PA-22 (751-676) .....	097-00102
Brake Diaphragm Pad (752-688) .....	<b>PC 690</b> .. 2003-1
Parking Brake Seal .....	<b>PC 580</b> AN6227-1
Brake Return Spring, PA-22 (752-881) .....	<b>PC 660</b> 082-00300
Brake Line, PA-22 .....	11987-041
Brake Control Cable, PA-22, SN 3218 and 3387 and up .....	14300-005
Brake Line Assembly, from union to tee, in bottom of fuselage, PA-22, SN 3218 and 3387 and up .....	14719-000
Brake Lever Knob (18875-007) .....	471-049
Trim Cable .....	U41671-016
Brake Line Assembly, PA-20 .....	U71061-004
Spacer Washer, PA-22 .....	81342-042

## Brake Master Cylinder For Piper PA-22



For more details on this rugged, trouble-free master cylinder, see the Tires, Wheels and Brakes section in this catalog.  
PA-22 Master Cyl. (451-709) ... **PC 690**.. 1248H  
**Master cylinder parts also available. Contact Univair for details.**

## Electrical System

<i>Description</i>	<i>Part No.</i>
Fuel Gauge Sender .....	U450-663
Fuel Gauge Receiver (450-664) .....	<b>PC 180</b> ... 3090-033
Capacitor .....	454-044
Capacitor .....	454-083
5-Amp Circuit Breaker (454-648) .....	<b>PC 625</b> W23X1A1G-5
15-Amp Circuit Breaker (454-650) .....	W23X1A1G-15
25-Amp Circuit Breaker .....	454-652

## Electrical System (continued)

<i>Description</i>	<i>Part No.</i>
10-Amp Circuit Breaker .....	.....
(454-657) .....	<b>PC 625</b> ..W23X1A1G-10
Cable Clamp .....	454-920
Battery Drain Tube Clamp .....	454-925
Cross Connector .....	455-161
30-Amp Starter Switch Fuse (461-624) .....	<b>PC 635</b> .. AGC-30
Dome Light Lens(472-330) .....	12715-000
Starter Switch Solenoid .....	U487-149
Starter Switch (487-527) .....	U487-550
Master Switch (487-776) .....	<b>PC 580</b> .. AN3023-1B
Landing Light Kit for all PA-20 and PA-22, SN 1-2424 except 2378 .....	751-200
Wing Root to Switch Wiring Harness .....	12298-018
Landing Light Center Attach Bracket .....	U12524-002
Landing Light Outboard Right Hand Attach Bracket .....	U12524-003
Landing Light Outboard Left Hand Attach Bracket .....	U12524-004
Landing Light Attachment Plate .....	U12525-000
Landing Light Mounting Plate, PA-22, SN 1-2377 and 2379-2424 .....	U12527-000
Rib Reinforcement Outer Plate .....	U12529-002
Rib Reinforcement Center Plate, PA-22, SN 1-2377 and 2379-2424 .....	U12529-003
Landing Light Lens, PA-22, SN 1-2377 and 2379-2424 .....	12532-000

## Starter Solenoid FAA/PMA Approved



(With 5/16" Terminals)

Starter Solenoid .....U487-149

This FAA/PMA approved solenoid is a 6 volt unit. It is a direct replacement for the original Piper solenoid. The 6 volt unit has larger contacts than a 12 volt unit thus providing a longer service life. The existing wiring is adequate for a 12 volt electrical system using this solenoid.

**All parts listed are for both the PA-20 and the PA-22, unless otherwise specified.**

# PIPER PA-20, PA-22

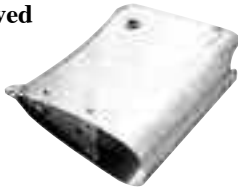
## Electrical System (continued) Landing Light Kit



For all PA-20, and PA-22  
(SN 1-2377 and 2379-2424) .....751-200  
For PA-22 (SN 2378  
and 2425 and up).....754-052

## Wing Navigation Light Bracket FAA/PMA Approved

For use with  
Grimes Model "E"  
Type Light or  
equivalent



Part Number .....U12560-000

<i>Description</i>	<i>Part No.</i>
Landing Light Lens, Top/Bottom Attach Strip, PA-22, SN 1-2377 and 2379-2424.....	U12533-002
Landing Light Lens, Side Attach Strip, PA-22, SN 1-2377 and 2379-2424 .....	U12533-003
Wing Navigation Light Bracket .....	U12560-000
Fuse Block.....	13051-000
Battery Box Lid, PA-22, SN 1012, 1022, 1024 and up.....	14065-000
Battery Air Intake Tube, PA-22, SN 1021, 1022, 1024 and up .....	14066-000
Positive Insulation Strip, PA-22, SN 1021, 1022, 1024 and up .....	14070-000
Landing Light Lens, Side Attach Strip, Left Hand, PA-22, SN 4050 and up (U14786-000) .....	U12533-003
Terminal Bolt Attach Washer .....	U81342-056

## Radio Installation

<i>Description</i>	<i>Part No.</i>
Antenna Grommet (434-126) <b>PC 530</b>	AN931-3-5
Magneto Filter (460-634) ..... <b>PC 115</b>	A293
Insulator .....	467-062
Antenna Attach Link at Rudder .....	10824-000
Microphone Holder .....	23303-000

## Engine

<i>Description</i> .....	<i>Part No.</i>
Firewall Grommet (434-142) .....	<b>PC 590</b> MS35489-22
Oil Temperature Bulb Adapter, PA-22, SN 8000-9684 .....	15244-000
Oil Radiator Line Adapter (451-855).....	<b>PC 525</b> 3200X6
Oil Line Attach Clamp.....	454-933
Oil Breather Hose Clamp, PA-22 150-160 hp.....	454-970
Oil Radiator Attach Connector (455-158) .....	<b>PC 525</b> 500X8
Oil Line Elbow .....	458-931
Oil Line Elbow .....	458-932
Air Filter (40599).....	<b>PC 275</b> 600314
Oil Line Elbow (460-663).....	<b>PC 525</b> 3350X2
Lord Mount, PA-22, SN 3387 and up .....	475-134
Plug at Engine Baffle, PA-22, SN 1-2377 and 2379-2424 .....	480-932
Cowl Fastener Receptacle... <b>PC 180</b>	99947P130
Oil Line Ring Seal, 135-160 hp.....	484-654
Carburetor Air Box Ball Stud, PA-22, SN 1760 and up .....	487-542
Top Center Baffle Plate Attachment Bracket Assembly, PA-22, SN 354 and up .....	10175-000
Spinner Back Plate (metal propeller), PA-22, SN 1-7 .....	U13663-000
Muffler Assembly, less shroud.....	U10308-003
3-inch Right Hand Front Baffle Hanger Support.....	10415-002
Intercylinder Baffle Support, PA-22, SN 534-2377 and 2379-2424 .....	10415-003
Muffler Shroud Clip.....	U10430-000
Tailpipe Clamp, PA-22, SN 9205 and up .....	U10466-033
Baffle Attach Rear Tie Rod, Colt....	U10487-000
Cabin Heater to Muffler Shroud Flex Hose, PA-22, SN 1-2377 and 2379-2424 .....	10525-005
Muffler to Cabin Heat Box, Front Seat Hose, PA-22, SN 2378 and 2425 and up .....	10525-018
Exhaust Stack Lower Shroud with Rear Seat Heater, PA-22, SN 354 and up .....	U10764-003

## Nose Gear Mount FAA/PMA Approved



Part Number .....U13034-000

## Engine (continued) All-Aluminum Nose Cowls FAA/PMA Approved



PA-20 115-125 hp. and  
PA-22 SN 1-533.....U11958-004  
PA-20 135 hp. and PA-22 135, 150  
and 160 hp. SN 534 and up .....

U13778-000  
PA-22 108 hp., SN 8000 and up .....

<i>Description</i>	<i>Part No.</i>
Exhaust Stack Upper Shroud Half with Rear Seat Heater, PA-22, SN 354 and up .....	U10843-003
Tailpipe Support Tube with Rear Seat Heater, PA-22, SN 354 and up .....	U11392-003
Carburetor Air Box Leather Baffle .....	11950-004
Carburetor Air Box less filter with Rear Seat Heater, PA-22, SN 354-1759.....	11950-007
Breather Tube .....	11957-000
Tailpipe Support Tube with Rear Seat Heater, PA-22, SN 354 and up .....	U11963-002
Front Exhaust Stack Assembly (12043-17) .....	U12043-023

## Spinner for PA-22 150-160 hp. FAA/PMA Approved



Spinner Dome .....

U14422-000

Front Plate .....

U14426-000

Back Plate .....

U14424-000

Complete Assembly .....

U14422-A

## Spinner for PA-22 108, 125 and 135 hp. SN 534 to 7642, with Sensenich AM Series Propeller (FAA/PMA Approved)

Front Plate.....U13664-000  
Back Plate.....U13663-000  
Spinner Dome..U13661-000  
Complete Assy ...U13661-A



**If there is an item you need, but can't  
find, contact us! 303-375-8882**

# PIPER PA-20, PA-22

## Engine (continued)

### PA-22 Baffles

Description	Serial Numbers	Part Number
Left Hand Side Rear .....	2378 and 2425 and up.....	U14430-000
Left Hand Side Front .....	2378 and 2425 and up.....	U14429-000
Right Hand Side Front .....	2378 and 2425 and up.....	U14432-000
Right Hand Side Rear .....	2378 and 2425 and up.....	U14437-000
Left Hand Front .....	2378 and 2425 and up.....	U14440-000
Left Hand Rear.....	3886 and up.....	U14431-006
Right Hand Front .....	2378 and 2425 and up.....	U14439-000
Right Hand Rear .....	2425-3885 .....	U14443-000
Right Hand Rear .....	3886 and up.....	U14443-005

### FAA/PMA Approved & Original Piper PA-22 Exhaust System Parts



Muffler Assembly (includes shroud and clip) .....	12742-006
Muffler (pictured, includes U452-093 Muffler Safety Bail) .....	U10308-003
Exhaust Stack, Front, 125-160 hp., SN 1 thru 7999 (pictured).....	U12043-023
Exhaust Stack, Rear, 125-135 hp., SN 1 thru 806 (pictured) .....	U12043-022
Exhaust Stack, Rear, SN 354 and up (used with rear seat heater) .....	U13238-005
Tailpipe .....	U11417-004
Tailpipe Support Tube, SN 354 and up (used with rear seat heater) Tailpipe to stack.....	U11392-003
Tailpipe Support Tube, SN 354 and up (used with rear seat heater) Tailpipe to muffler .....	U11963-002
Muffler Shroud .....	U12742-004
Shroud Clip .....	U10430-000
Upper Shroud, SN 354 and up (used with rear seat heater) .....	U10843-003
Lower Shroud, SN 354 and up (used with rear seat heater).....	U10764-003
Clamp-Tailpipe Support, SN 354 and up (used with rear seat heater) .....	U18116-005
Clamp-Stack to Muffler .....	U70591-002
Clamp-Stack to Tailpipe, SN 1949 and up .....	U14235-000
Clamp-Stack to Muffler, Right Hand, with stud, SN 1 thru 353.....	11394-000

## Engine (continued)

### Oil Pressure Line FAA/PMA Approved



Part Number .....U71061-000

Univair has the world's largest stock of PA-20 and PA-22 parts. If you require a part and do not see it listed in our catalog, please call or fax us for price and availability.

**Phone: 303-375-8882**  
**Fax: 800-457-7811**

## Engine (continued)

Description	Part No.
Exhaust Stack Assembly, Rear, 125-135 hp., PA-22, SN 1-806..	U12043-022
Exhaust Stack Assembly, Rear, Colt.....	12043-027
Cold Air Intake Assembly, PA-20 ..	12315-000
Throttle Clamp Assembly.....	12316-000
Cold Air Intake Trim Plate .....	12320-000
Spinner Strap, PA-22, SN 8-535 and 8032 and up .....	U12330-004
Left Hand Front Baffle, 135 hp.....	12428-004
Cowl Fastener Cup (12707-000).....	<b>PC 180</b> 6021401-36
Cowl Fastener Assembly (12723-000).....	<b>PC 180</b> 6021401-22
Muffler Shroud Assembly .....	U12742-004
Right Hand Front Baffle, 125 hp., PA-22, SN 1-533 .....	12749-000
Right Hand Front Baffle, 135 hp., PA-22 .....	12749-005
Cowl Support Rod .....	12809-000
Oil Valve Quick Drain .....	U12956-004
Bottom Engine Baffle, Colt.....	U13136-000
Carburetor Air Scoop, PA-22 .....	U13137-000
Top Cowl, complete, PA-22 .....	U13158-000
Right Hand Side Cowl, PA-22 ....	U13158-014
Left Hand Side Cowl, PA-22.....	U13158-015
Spinner (metal propeller), PA-22, SN 8-553 (13163-000) .....	U13661-000
Spinner Backplate (metal propeller), PA-22, SN 8-553 .....	13164-000
Exhaust Stack, Rear, with rear seat heater, PA-22, SN 354 and up ..	U13238-005
Spinner Backplate, Colt.....	U13663-000

### All-Metal Cowling FAA/PMA Approved



#### Bottom Cowls

PA-22 125 hp., SN 1-353 .....	U13119-000
PA-22 125 hp., SN 354-533 .....	U13119-003
PA-22 135 hp., SN 534-1759 .....	U13784-000
PA-22 135-160 hp., SN 1760-7642 .....	U14258-000
PA-22 108 hp., SN 8000 and up..	U14258-005
Special Cowl for PA-22 "Taildragger" Conversion:	
Tri-Pacer .....	L1041-10
Colt .....	L1041-20
PA-20 Bottom Cowl, 125 hp. ....	13159-005
PA-20 Bottom Cowl, 135 hp. ....	13159-007
Tri-Pacer Side Cowl, Left Hand..	U13158-015
Tri-Pacer Side Cowl, Right Hand..	U13158-014
Top Center Cowl.....	U13158-013

**All items on this page are Price Code 150 unless otherwise noted**

Price and availability subject to change without notice. Univair's Toll Free Sales: 1-888-433-5433

# PIPER PA-20, PA-22

## Engine (continued) Engine Mount-FAA/PMA Approved



- PA-20 Lycoming 115-125 hp.,  
1950-1951 .....U11786-000
- PA-20 Lycoming 125-135 hp.,  
1952-1953 .....U11786-013
- PA-22 Lycoming 125 hp.,  
SN 1-353 .....U11786-012
- PA-22 Lycoming 135 hp.,  
SN 354-3386 .....U11786-014
- PA-22 Lycoming 150-160 hp.  
SN 3387 and up, and Colt .....U11786-015

- | <i>Description</i>   | <i>Part No.</i> |
|--|-----------------|
| Spinner Frontplate, Colt .....   | U13664-000      |
| Air Filter, 135-160 hp.<br>(13681-002) ..... <b>PC 275</b> .....                     | 121494          |
| Oil Radiator Right Hand Mounting<br>Bracket, 135-150 hp. PA-22,<br>SN 534-3453 ..... | 13720-000       |
| Oil Radiator Right Hand<br>Mounting Bracket, PA-22,<br>SN 3453 and up .....          | U13720-004      |
| Oil Radiator Line Assembly, Right Hand,<br>135 hp. (no vacuum pump) .....            | 13722-000       |
| Oil Radiator Line Assembly, Left Hand,<br>135 hp. (no vacuum pump) .....             | 13723-000       |
| Oil Radiator Left Hand Mounting<br>Bracket, 135-150 hp. PA-22,<br>SN 534-3453 .....  | 13725-000       |
| Oil Radiator Left Hand<br>Mounting Bracket, PA-22,<br>SN 3454 and up .....           | U13725-007      |
| Oil Radiator Lock Plate,<br>135-160 hp. ....   | 13726-000       |
| Carburetor Heat Box, less filter,<br>150-160 hp. ....                                | 14253-004       |
| Oil Radiator Right Hand Inlet Line .....   | 14366-000       |
| Oil Radiator Left Hand Inlet Line .....  | 14367-000       |
| Breather Tube, 150 hp. PA-22,<br>SN 3708 and up .....                                | U14441-000      |
| Front and Rear Baffle Tie-rod, 150-160 hp.<br>PA-22, SN 2378 and 2425 and up ..      | U14513-000      |
| Oil Radiator Bracket Support Strap,<br>PA-22, SN 2425-3885 .....                     | 14549-000       |
| Oil Radiator Line Bracket, PA-22,<br>SN 6760, 6761, and 6763 and up .....            | 15019-000       |
| Oil Temperature Bulb Adapter, PA-22,<br>SN 9685 and up .....                         | 15244-000       |

- | <i>Description</i>  | <i>Part No.</i> |
|---|-----------------|
| Tailpipe Support Attach Clamp for<br>muffler shroud, with rear seat heater,<br>PA-22, SN 354 and up ..... | 18116-005       |
| Door Latch Kit .....  | 52745-000       |
| Cable Swivel Fitting: Cabin Heat ..   | U70371-000      |
| Cable Swivel Fitting: Carburetor<br>Heat .....  | U70371-002      |
| Exhaust Stack Clamp Assembly .....  | U70591-002      |
| Oil Pressure Hose Assembly .....  | U71061-000      |
| Intercylinder Baffle Hanger Rod .....   | 71451-003       |
| Front Baffle Hanger Rod .....   | 71451-008       |
| Carburetor Air Box to Carburetor Attach<br>Gasket, PA-22, SN 1-2377<br>and 2379-2424 .....                | 73451-003       |
| Breather Line Connector Hose .....  | 74311-000       |
| Intercylinder Baffle, 135 hp. ....  | 74912-000       |
| Control Cable Clamp .....   | 80032-034       |
| Baffle Attach Clamp, PA-22 .....  | 80032-041       |
| Propeller Bolt Attach Washer .....  | 80122-055       |
| Breather Line Connector Hose .....  | 82371-056       |
| Fiber Attach Washer .....   | 85012-047       |
| Control Cable Swivel Attach Fitting ..  | U91193-000      |

## Engine Oil Cooler



- Engine Oil Cooler .....
- Engine Oil Cooler (Surplus Overhaul) .....

## Miscellaneous

### Military Surplus Seat Belt 3 Inches Wide, Heavy Duty



- Nylon .....
- Cotton .....

## Model 70509 Flasher

### Specifications: Current Draw:

- 2.7 AMPS @ 14V
- 1.35 AMPS @ 28V

**Weight:** .27 lbs.

**Wire:** 20 AWG Teflon

**Lamp:** 35W Halogen

**Filament:** CC-8 (axial)

**Lens:** Lexan® Polycarbonate

Whelen Engineering introduces the Model 70509 Flasher, a totally new self-contained, flashing anti-collision light assembly that is FAA TSO-C96A approved. The Model 70509 FLASHER features a rugged polycarbonate lens with internal optics (patent pending), replaceable halogen lamp and flasher assemblies. It can be installed as a replacement on 1967-1979 Cessna aircraft, on most general aviation aircraft, home builds, and ultralights. A separate flasher power pack is not needed because the unit is completely self-contained.

### Model 70509—Flashing Anti-Collision Light

Part Number	Description
01-0770509-05	28V Flasher Assembly (red/white)
01-0770509-04	28V Flasher Assembly (white)
01-0770509-03	28V Flasher Assembly (red)
01-0770509-02	14V Flasher Assembly (red/white)
01-0770509-01	14V Flasher Assembly (white)
01-0770509-00	14V Flasher Assembly (red)

**PC 620**

<i>Description</i>	<i>Part No.</i>
--------------------	-----------------

- |   |            |
|---|------------|
| 1/4 inch Steel U Channel<br>(6-foot length) (750-284) .....         | X141472    |
| 3/8 inch Steel U Channel<br>(6-foot length) .....                   | U750-285   |
| Rear Spar Splice Kit .....  | 750-737    |
| Front Spar Splice Kit .....   | 750-738    |
| Landing Light Kit, PA-20 and PA-22,<br>SN 1-2424, except 2378 ..... | 751-200    |
| Landing Gear Nut and Bolt Kit,<br>PA-22 .....                       | 752-214    |
| Window Ventilator Kit, .....  | U752-287   |
| Landing Light Kit, PA-22,<br>SN 2378 and 2425 and up .....          | 754-052    |
| Fabric Modification Kit (complies<br>with A.D. 74-17-04) .....      | 754-404    |
| Litter Strap .....  | 12732-003  |
| Litter Strap .....  | 12732-004  |
| Rib Repair Cap Strip .....  | U16651-004 |

**All parts listed are for both PA-20  
and PA-22, unless otherwise specified.**

**If there is an item you need  
but can't find, contact us!  
303-375-8882  
Fax 303-375-8888**

**PC 699**

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## PA-22 "TAILDRAGGER" LANDING GEAR CONVERSION

UNIVAIR holds STC SA45RM for the conversion of the PA-22 to conventional landing gear configuration. Our kits and parts have become popular items for the general aviation enthusiast and aircraft restorer.

The conversion is not a difficult project. The basic steps involved in making the conversion are as follows: New forward gear fittings are welded on the first station aft of the firewall. The new gears are used for fitting alignment. The new Taildragger gear rear leg utilizes the original forward PA-22 fuselage fittings and the main leg of the Taildragger gear uses the newly installed fittings. The hydrasorb attachments remain the same. "U" channels and fabric re-working are required on the belly to accommodate the gears being moved forward. A bracket is welded on the tailpost for the tailwheel assembly. New rudder pedals and toe brakes need to be installed. Rudder control cables need some re-working. The bottom cowl needs to be modified or replaced with a PA-20 type cowl which UNIVAIR can provide. This is a generalization of what is required, and is covered in detail in our instruction sheets and supplied blueprints.

### Landing Gear Conversion Kits

**2200 Series Kits contain material required for converting a Piper PA-22-108, 135, 150 or 160 aircraft to the Taildragger configuration.**

The 2200 Series Conversion Kits provide you with a choice of wheels and brakes. You can use the L1012-40 and -41 landing gears which allow you to use your present PA-22 wheels and brakes, or the heavy duty Cleveland wheels and brakes are also available. You have a choice of two pneumatic tailwheels. Solid rubber tailwheels are also available on special request.

A popular kit with most aircraft owners has been our L2200-01 (PA-22 wheels and brakes) equipped with options L4 and L7 (dual brakes and the Scott tailwheel — see next page).

The Basic Conversion Kit includes FAA/PMA approved conventional "wide gears," which are fabricated from AISI 4130N tubular steel and welded in our precision jigs. Pre-cut fuselage panels fabricated from 2024 T3 and 5052 H34 aluminum alloy are also included. Various types of nuts and bolts required for installation are included.

**All L2200 Series Landing Gear Conversion Kits include STC SA45RM Approval, blueprints and instructions.**

### Conversion Kits



**INCLUDES:** L1012-40/-41 conventional landing gears to accommodate the original PA-22 wheels and brakes. Also includes STC approval, front gear and tail fittings, tailwheel spring and clamps, aluminum form channels, metal reinforcements, rear fuselage hand hold, rudder fork, installation instructions, left/right gear inner pans, left/right gear outer fairings, AN hardware kit, PA-20 entry step, forming "U" channels, and springs for rudder tension.

**Basic Kit .....L2200-01**

**Kit for Heavy Duty Cleveland Wheels and Brakes (excludes wheels and brakes).....L2200-03**

— Same as Basic Kit except for the use with Cleveland wheels and dual piston brakes. Includes required axle spacers.

**Kit for Heavy Duty Cleveland Wheels and Brakes (includes wheels and brakes).....L2200-03A**

— Same as Kit L2200-03, PLUS the Cleveland wheels and disc brakes (199-231KIT)\*

**See the following page for additional Conversion items.**

\*199-231 Kit useable only with 600 X 6, 700 X 6 Tires.

# PIPER PA-20, PA-22

## PA-22 Taildragger Conversion

### Landing Gear Conversion Kit Options



#### LOPT-L2

— Left side only Complete brake system with Cleveland 10-54 slave cylinders, using firewall brake fluid reservoir. This kit **cannot** be converted to a dual brake system. If you desire a dual braking system, Univair highly recommends you purchase the LOPT-L4 Kit. (for installation in SA45RM Conversion only)

#### LOPT-L4 Dual Brake Controls

— Complete brake system with Cleveland 10-54 slave cylinders and firewall brake fluid reservoir for dual brake controls. (Shown in picture above.) (for installation in SA45RM Conversion only)

**LOPT-L6** — Maule 8-inch Pneumatic Tailwheel, and steering spring kit.

**LOPT-L7** — Scott 8-inch Pneumatic Tailwheel, with 1-1/4-inch to 1-3/4-inch spring adapter, and steering spring kit.

**NOTE:** These kits do not include rudder cables. When ordering, please specify serial number of PA-22 being converted.

#### Landing Gear Conversion Information Packet.....STC-SA45RM

This kit is intended for individuals considering the PA-22 to Taildragger conversion. The information packet includes installation instructions and blueprints. STC approval, Supplemental Flight Manual, and Weight and Balance forms are excluded. These will be included when the L2200 Series Landing Gear Conversion Kit is purchased. The price of the STC SA45RM information packet will be applied to the purchase of an L2200 Series Landing Gear Conversion Kit, but will not be refunded.

### Cleveland Heavy Duty Wheel & Brake Conversion Kit



Cannot be used on standard PA-22 Tri-Pacers or with 800X6 tires

This kit consists of two each 30-41B Brake Assemblies and 40-84 Wheel Assemblies currently approved under STC-SA45RM. There is a dual piston brake assembly to provide superior performance for the Taildragger Conversion.

Conversion Kit ..... **PC 660**... 199-231000  
Requires STC Installation.

Additional Spacers required:  
2 each IB Axle Spacers **PC 150**.. U1105-06  
2 each OB Axle Spacers **PC 150**.. U1105-09

### Landing Gear Conversion Kit for 3200 Tailwheel



Kit for 3200 series 8-inch pneumatic tailwheel, with 1 1/4 inch to 1 3/4 inch spring adapter, and steering spring kit.

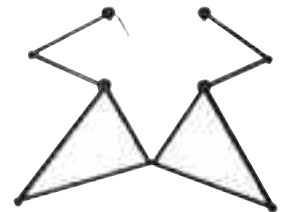
3200 Tailwheel kit .....LOPT-L7

### PA-20 Style Bottom Cowl



Eliminate that old "22" bottom scoop!  
Tri-Pacer .....L1041-10  
Colt .....L1041-20  
(For converted Tri-Pacer only)

### Conical Engine Mount



Required only if original mount is not serviceable.

Engine Mount.....U11786-013

### Landing Gear to Fuselage Fairing Kit



Fairing Kit .....U1120-00

# PIPER PA-20, PA-22

## 180 hp. Lycoming Engine Conversion for PA-22 Taildragger Modified Aircraft

Univair holds STC-SA181RM to cover the installation of the Lycoming O-360-A4A engine with the Sensenich 76EM8-60 propeller in the SA45RM Taildragger conversion. It is important to note that this STC approval is only valid on those PA-22 aircraft that have been converted to the conventional landing gear configuration as approved by STC-SA45RM. This modification does not require any structural change in the airframe. It has been approved for the Dynafocal mount for smoother operation. We do require that our manufactured engine mount be purchased to obtain the STC. The nose, top, and side cowls are reused. We supply a template for bottom cowl modification. All parts are available and can be purchased separately, or as a kit. For simplicity, the parts are grouped and priced in three categories. They are listed as Kit #1, Kit #2, and Kit #3. Kit #1 has most of the parts directly related to the engine. Kit #2 has the fuel system, and Kit #3 contains the alternator and related parts. The STC, Engine Mount, and Exhaust System may be purchased individually.

Take-off and climb performance is greatly increased by installing the 180 horsepower engine. Soft field and short field performance is noticeably improved, as well as operations at airports at higher elevations. Increases in cruise and top speeds are also noted. Considerable testing on the prototype conversion was carried out in Leadville, Colorado, with an elevation of 9,927 feet. The modification was thoroughly tested by the FAA including cylinder head cooling, oil temperature cooling, heat rise for the carburetor, and noise emissions tests. The climb and speed tests, which included a dive at over 200 mph, were all performed at gross weight. The aircraft was spun fifteen times under different conditions of balance and weight distribution. If you would like more information on this subject, contact Univair for a free brochure.

**STC not approved for Seaplane use.**

### PA-22 "Taildragger" Landing Gear Conversion Dynafocal Engine Mount



For use with 0-360 Engine and STC SA 181RM only

Part Number.....L1056-00

### STC SA 181RM (Includes all blueprints, instructions and mount.)

Part Number.....STC-SA181RM

### Muffler Assembly (stacks and shroud)

Muffler Assembly .....L1073-00

### Kit #1 — includes parts for engine build-up.....O-360-KIT-1

Quantity Req'd.	Description	Part Number
1	Oil Cooler Bracket (left hand)	L1066-01
1	Oil Cooler Bracket (right hand)	L1066-02
2	Oil Cooler Line (left hand & right hand)	L1064-08
3	Oil Cooler Fittings, 45° (2 each)	<b>PC 525</b> C5355X8
	Oil Cooler Fitting (1 each)	<b>PC 525</b> C3359X6
1	Carburetor Air Box Assembly	L1057-A
1	Throttle Clamp Assembly (L1072-00)	L1072-03
1	48-inch Gerdes Mixture Control	<b>PC 283</b> A800-20-0480
1	Bonding Strap	L1063-06
1	Heater Inlet Flange	L1071-01
1	"Y" Assembly (Heater)	L1071-02
1	Engine Mount Hardware Set (engine to mount / mount to firewall)	O-360-HD1
4	Lord Mounts	<b>PC 299</b> J7402-24
2	Magneto Adapters	<b>PC 245</b> 10-157209
1	Tachometer Cable (486-574)	<b>PC 635</b> U1713-R250
1	Starter Extension Cable	L1063-03
3 feet	Flexible Heater Hose	<b>PC 401</b> SCAT8
1 foot	Flexible Heater Hose	<b>PC 401</b> SCAT12

### Kit #2 — fuel lines and accessories.....O-360-KIT-2

This kit contains the following:

Quantity Req'd.	Description	Part Number
1	Fuel Pump (electric)	480-532
1	Combination Fuel and Manifold Pressure Gauge	LTN55001A
1	Fuel Line	L1064-01
1	Fuel Line	L1064-02
1	Fuel Line	L1064-03
1	Fuel Line	L1064-04
1	Fuel Line	L1064-05
1	Fuel Line	L1064-06
1	Manifold Pressure Line (L1064-07)	L1064-06
1	Fuel Line	L1072-01
1	Carburetor Adapter Assembly	L1072-02
1	Hardware and Fittings Set	O-360-HD2
2	A/C Fuel Pump Adapters	<b>PC 210</b> LW13904

### Kit #3 — Alternator and Related Parts .....O-360-KIT-3

This kit contains the following:

Quantity Req'd.	Description	Part Number
1	Alternator	LA-152A
1	Voltage Regulator	LA-153D
1	Overvoltage Relay	LOVR-12B
1	Mounting Bar Assembly	L1063-01
1	Spike Guard Assembly	LA-178
1	Capacitor	LA-177-1
1	Resistor	LA-152-A1
1	60-Amp Circuit Breaker	LA-154
1	Alternator Adjustment Arm	L1063-02
1	Belt	L41320
1	5-Amp Circuit Breaker	<b>PC 625</b> PSM-5
1	SPST Toggle Switch	<b>PC 590</b> MS35058-21

This kit also contains other miscellaneous hardware items.