

PACIFIC



AIRMOTIVE

AERONAUTICAL SUPPLY CATALOG

700



# KOLLSMAN *Scout* INSTRUMENTS



## 1 KOLLSMAN Scout AIR SPEED INDICATOR

A reliable Air Speed Indicator at moderate cost. Range 30-200 m.p.h. Also available, ranges 30-160 m.p.h. and 40-250 m.p.h. Fits AN standard size mounting. Radium coated pointer, numerals and

main graduations also glow brightly under fluorescent (black) light. Weight only 8 ounces. Provision for pitot and static connections in rear of case. State range desired when ordering. Price \$24.00

## 2 KOLLSMAN Scout STANDARD ALTIMETER

An accurate, rugged Standard Altimeter of a range of 20,000 feet, with one revolution of the pointer for each 10,000 feet. Has settable barometric subdial like the Sensitive Altimeter so that the Altimeter can be reset in the air. The subdial is graduated in inches of mercury. Fits AN standard mounting when provision has been made for setting knob and is directly interchangeable with the Scout Sensitive Alti-

meter. Provision for the outside static connection to eliminate the effect of cabin pressure variations is provided in the rear of the case. The instrument has radium coated pointers, numerals and main graduation which also glow brightly under fluorescent (black) light. Weight approximately 12 ounces. Price \$24.00

## 3 KOLLSMAN Scout SENSITIVE ALTIMETER

The well-known Kollsman Sensitive Altimeter now in a new version for the private plane owner — the same sensitiveness of indication. The long pointer indicates altitude in hundreds of feet with graduations of every 20 feet, while the short pointer indicates thousands of feet. The range is 20,000 feet. A barometric subdial graduated in inches of mercury is provided. Fits AN standard mounting when pro-

vision has been made for setting knob. Is directly interchangeable with Kollsman Scout Standard Altimeter. Provided with radium coated pointers, numerals and main graduations which also glow brightly under fluorescent (black) light. Provision for static line connection in the rear of the case. Weight approximately 20 ounces. Price \$70.00

## 4 KOLLSMAN Scout SMALL COMPASS

A compact floating card compass with large compass performance. Fits AN small standard mounting. Equipped with N-S and E-W compensating screws conveniently located at top of dial. Unlighted.

Weight 9 ounces. Main graduations are radium treated and also glow brightly under fluorescent (black) light. Price \$18.00

## 5 KOLLSMAN Scout STANDARD COMPASS

A sturdy, reliable, standard type compass for the average private plane. Fits AN standard mounting. Conveniently located N-S and E-W compensating screws. Accessible from front of instrument. Un-

lighted. Main graduations are radium treated and also glow brightly under fluorescent (black) light. Weight 15 ounces. Price \$30.00

## 6 KOLLSMAN Scout VERTICAL SPEED (Climb) INDICATORS

An excellent indicator for the private flyer at new low cost. The indicator has the standard transport indicating range of 0-2,000 ft./min. A logarithmic type dial provides close indication near the zero or level flight position and more condensed indication in the higher ranges where close readings are not required. Fits standard AN mounting. Compensated

for effects of temperature on mechanism but without thermal insulation (bottle). Radium coated pointer, numerals and main graduations also glow brightly under fluorescent (black) light. Provision in rear of case for connection to static pressure line of Air Speed Indicator. Weight approximately 17 ounces. Case depth 3 3/8". Price \$50.00

## 7 KOLLSMAN Scout MANIFOLD PRESSURE GAGE

An accurate, rugged manifold pressure gage particularly important at this time with the introduction of new variable pitch propellers for private aircraft. Range 10 to 50 inches of mercury. Fits AN standard mounting. Weight approximately 11 1/2 oz. Case

depth approximately 3". Mechanism compensated for effect of temperature changes. Equipped with outlet in rear of case for connection to engine manifold. Price \$30.00

## 8 KOLLSMAN Scout TACHOMETERS

Now included in the Scout line is the Kollsman Centrifugal Tachometer — a rugged, durable Tachometer — widely used among smaller aircraft for some years. The instrument pointer makes 1 1/2 revolutions for the full range of 500-3500 r.p.m. It operates

by means of a direct flexible drive shaft connection to the engine outlet. The instrument has an angle outlet in the rear of the case. Weight 17 ounces. Price \$42.00



# Kinner Aircraft Engines

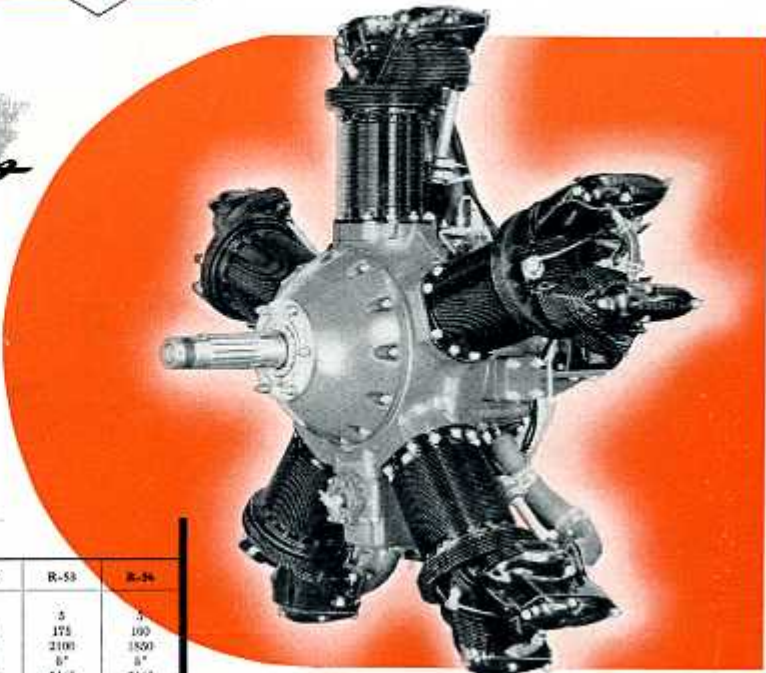
Designated the work horse of the air by the Army Air Forces, the Kinner Engine has been used in thousands of trainers and private aircraft.

All parts are available immediately from your P.A.C. Branch, for Models K-5, B-5, R-5; Series I and II, R-55, R-56. New and completely majored engines are kept in stock at all times.

Space does not permit complete listings of technical data and engine parts. However, overhaul manuals and parts lists are available on request. See page 18.

### SPECIFICATIONS

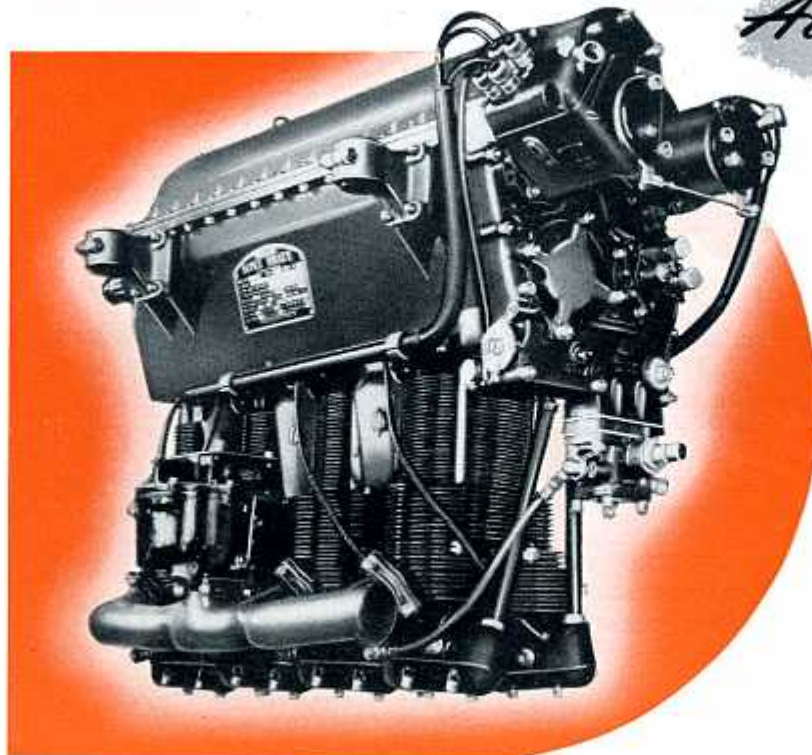
Kinner Model	K-5	B-5	R-5-1	R-5 Series 2	R-55	R-56	R-56
Type of engine	Radial Air-Cooled for all types						
Number of cylinders	5	5	5	5	5	5	5
Rated horsepower	100	125	160	180	280	175	190
Rated r.p.m.	1810	1955	1975	1850	1850	2100	1850
Bore	4 3/4"	4 3/4"	4 7/8"	5"	5"	5"	5"
Stroke	5 1/4"	5 1/4"	5 3/4"	5 1/2"	5 1/2"	5 1/2"	5 1/2"
Displacement	372 cu. in.	441 cu. in.	491 cu. in.	540 cu. in.	540 cu. in.	540 cu. in.	540 cu. in.
Compression ratio	5 to 1	5.25 to 1	5 to 1	5.5 to 1	5.5 to 1	5 to 1	5.5 to 1
Ignition	2 Scintilla Magneto	2 Scintilla Magneto	2 Scintilla Magneto	2 Bendix 8B-DL Magneto	2 Bendix 8B-DL Magneto	2 Bendix 8B-DL Magneto	2 Bendix 8B-DL Magneto
Carburetor	Stromberg NA-R5	Stromberg NA-R5	Stromberg NA-R5	Stromberg NA-R5 or Halsey Model 419	Stromberg NA-R5 or Halsey Model 419	Stromberg NA-R5 or Halsey Model 419	Stromberg NA-R5 or Halsey Model 419
Crankshaft propeller end	SAE No. 1 Taper	SAE No. 1 Taper	SAE No. 1 Taper	SAE No. 1 Taper	SAE No. 20 Splines	SAE No. 20 Splines	SAE No. 20 Splines
Engine weight dry, without carburetor, air heater, exhaust collector ring, starter, generator drive, fuel pump drive, vacuum pump drive, or propeller hub	275 lbs.	295 lbs.	305 lbs.	335 lbs.	345 lbs.	331 lbs.	362 lbs.
Overall diameter	45 1/2"	47 1/2"	48 1/2"	47 1/2"	47 1/2"	47 1/2"	47 1/2"
Mounting bolt circle	14"	14"	14"	14"	14"	14"	14"
Total length	32 1/2"	32 1/2"	32 1/2"	33 1/2"	33 1/2"	33 1/2"	33 1/2"
Fuel (Min. octane aviation gasoline)	73	73	73	73	73	73	73



*Special!*

INVESTIGATE OUR OVERHAUL EXCHANGE PLAN ON ALL MODEL KINNERS

# Menasco Aircraft Engines



Pacific Airmotive carries a complete stock of genuine factory parts for Menasco Engines series C-4, C-4S, D-4, and D-4S. Space does not permit complete listings of technical data and parts.

**Special New Menasco D-4 engine** of the most up-to-date type. Ideally suited for installation in place of older series Menasco and many other obsolete in-line engines. Cut your maintenance cost by modernizing your airplane with one of these new power plants. Specification and equipment listed below.

Normal list over.....\$2000.00  
 Special while they last..... 850.00  
 Generous allowance made on your old engine.

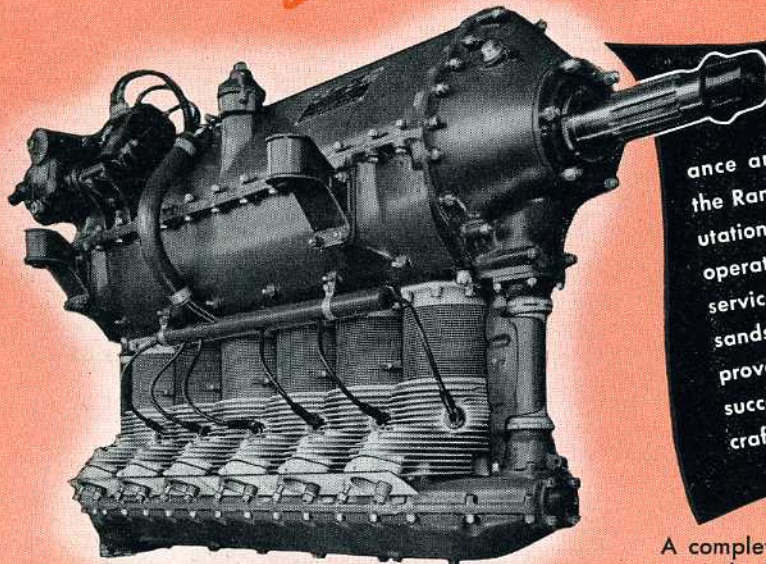
### MENASCO L-365-1 (D4) 4-CYLINDER INVERTED IN-LINE A.T.C. 67

**SPECIFICATIONS** — Direct drive, air-cooled. CAA rating 125 h.p. at 2175 r.p.m.; available for take-off 125 h.p. at 2175 r.p.m. Compression ratio 5.5:1. Bore 4.750"; Stroke 5.125"; Displacement 363 cu. in. Length 47.53"; Height 28.56"; Width 17.78"; Frontal area only 3.25 sq. ft. Weight (with carburetor, magnetos, accessory drives, oil pressure and scavenging pumps) 284.5 lbs. Weight in lbs./h.p. at sea level 2.28. Oil consumption at rated h.p. .50 lbs./b.h.p./hr. Oil consumption at rated h.p. .015 lbs./b.h.p./hr. Fuel octane rating 73.

**STANDARD EQUIPMENT** — Side air scoop, propeller hub cones and nut, steel exhaust flanges, engine lifting eye bolts, engine mounting brackets, hub for wooden propeller and starter gear.



# Ranger AIRCRAFT ENGINES



Economy of operation, low maintenance cost, high performance and dependability has gained for the Ranger power plants an enviable reputation among private flyers, commercial operators and all branches of the armed services. The use of Ranger Engines in thousands of trainers and combat airplanes has proven them to be the most modern and successful of the air-cooled inline type aircraft engine.

Write for complete details on our Ranger Overhaul Exchange Plan. Magnetos and carburetors are in stock to facilitate immediate accessory replacement on an exchange basis.

Space does not permit complete listings of parts, prices and specifications. See page 18 for parts catalogs and overhaul manuals for your particular model engine.

A complete stock of genuine Ranger Engine parts is carried at all Pacific Airmotive Branches. Extensive facilities and highly trained parts personnel enable us to render a most prompt and efficient service. Every order for parts is given personal attention which assures your complete satisfaction. Each specific Pacific Airmotive engine shop has complete facilities to overhaul or repair your Ranger Engine and Accessories in accordance with factory specifications. Thoroughly trained personnel, with a large percentage of licensed mechanics, assures prompt service and the highest degree of satisfaction. The shop superintendent at your nearest Pacific Airmotive Branch will be pleased to assist and advise you on any problems in connection with the maintenance of your aircraft.

## TABLE OF ENGINE MODEL DESIGNATIONS

Except for differences listed below, all 6-440C engines are identical in construction. These differences do not affect the method of overhaul and are given only for purposes of identification.

Ranger Designation	6-390-B	6-390D-1,-3	6-410B-1,-2	6-410B-3	6-440C-2	6-440C-2	6-440C-3	6-440C-4	6-440C-5	6-440C-5	6-440C-5	6-440C-5
Army Designation..	.....	.....	.....	.....	L-440-1	L-440-9	.....	.....	L-440-3	L-440-5	L-440-7	L-440-11
Navy Designation..	.....	.....	.....	.....	.....	.....	.....	.....	.....	L-440-2	.....	.....
Horsepower.....	145	150	165	175	175	175	180	190	200	200	200	200
Compression Ratio.	6:1	6:1	6.5:1	6.5:1	6:1	6:1	6.2:1	6.8:1	7.5:1	7.5:1	7.5:1	7.5:1
Fuel Octane Rating.	73	73	80	80	65	65	73	80	87	87	87	87
Carburetor.....	Strom. NAR4B	Strom. NAR4B	Strom. NAR4B	Strom. NAR4B	Strom. NAR4B	Strom. NAR4B	Strom. NAR4B	Strom. NAR4B	Marvel-Schebler	Strom. NAR4B	Marvel-Schebler	Marvel-Schebler
ID of Intake Pipes..	.....	.....	.....	.....	1.686"	1.686"	1.561"	1.561"	1.686"	1.561"	1.686"	1.686"
Magneto.....	Scintilla SB6R	Scintilla SB6R	Scintilla SB6R	Scintilla SB6R	Scintilla SB6R	Edison	Scintilla SB6R	Scintilla SB6R	Scintilla SB6R	Scintilla SB6R	Scintilla SB6R	Edison
Spark Advance.....	30°	30°	30°	25°	22°	22°	25°	25°	25°	25°	25°	25°
Ignition Harness...	Plain	Plain	Plain	Plain	Plain	Plain	Plain	Plain	Shielded	Shielded	Shielded	Shielded



Airplane	Model	Engine Mfg.	Engine Model	H.P.	Recommended Sensenich Propeller	Hub Notes	Price Each
Aeromarine-Klemm	L 26, L 26 A	Leblond	5 D	65	84	19	\$62.50
Aeronca	C 2	Aeronca		26	63 A		35.00
Aeronca	C 3	Aeronca	E 113, A,B,C	36	69 A 28	11	35.00
Aeronca	C 3 S	Aeronca	E 113, C	40	69 A 28	11	35.00
Aeronca	K	Aeronca	E 113, C	40	69 A 28	11	35.00
Aeronca	K	Aeronca	E 113 CB, CD, CDB	42-45	69 A 30	11	35.00
Aeronca	K S	Aeronca	E 113 CB, CD, CDB	42-45	72 A 30	11	40.00
Aeronca	K S	Aeronca	E 113, C	40	72 A 30	11	40.00
Aeronca	K C	Continental	A 40 4	40	69 J 28	9	35.00
Aeronca	L A	Leblond	5 E, 5 DE	70	78 R 52	19	55.00
Aeronca	L B	Leblond	5 DF, 5 F	85-90	78 R 54	19	55.00
Aeronca	L C	Warner	Scarab Jr	90	80 W	13	60.00
Aeronca	L C S	Warner	Scarab Jr	90	84 J	13	62.50
Aeronca	K C A, 50 C, 50 TC	Continental	A 50	50	76 B 51	9	45.00
Aeronca	S 50 C	Continental	A 50	50	76 B 47, 76 B 49	9	45.00
Aeronca	50 F, KF	Franklin	4 AC 150	50	70 F 45	4	40.00
Aeronca	S 50 F	Franklin	4 AC 150	50	70 F 43	4	40.00
Aeronca	50 L, 50 LA, 50 TL	Lycoming	O 145 A 1	50	70 L 45	4	40.00
Aeronca	50 L, 50 LA, 50 TL	Lycoming	O 145 A 2	55	70 L 47	4	40.00
Aeronca	60 F, 60 TF	Franklin	4 AC 150	60	70 F 47	4	40.00
Aeronca	60 F	Franklin	4 AC 171	60	72 F 40	4	40.00
Aeronca	65 C, 65 CA	Continental	A 65	65	72 C 42, 72 C 44	9	40.00
Aeronca	New Chief	Continental	A 65	65	72 C 42, 72 C 44	9	40.00
Aeronca	S 65 C, S 65 CA	Continental	A 65	65	76 C 40, 76 C 38	9	42.50
Aeronca	65 LA, 65 LB	Lycoming	O 145 B 2	65	70 LY 34, 70 LY 36	4	40.00
Aeronca	65 TC, TAC, L 3	Continental	A 65	65	72 C 42, 72 C 44	9	40.00
Aeronca	Champion	Continental	A 65	65	72 C 42, 72 C 44	9	40.00
Aeronca	65 TL, TAL	Lycoming	O 145 B 2	65	70 LY 34, 70 LY 36	4	40.00
Aeronca	65 TF, TAF	Franklin	4 AC 176 B2	65	72 F 42, 72 F 44	4	40.00
Aeronca	7AC Champion, 11AC Chief	Continental	A 65	65	72 C 42, 72 C 44	9	40.00
Aeronca	7AC Champion, 11AC Chief	Continental	A 65	65	72 CK 42, 72 CK 44	22	40.00
Akron Funk	Funk B	Funk	E	63	755 CF	16	45.00
Akron Funk	Funk L	Lycoming	GO 145 C 2	75	76 L 54	4	45.00
Arrow	F	Ford	V 8	82-90	90 BAL 61	1	82.50
Arrow Sport		Leblond	5 D, 5 DE	65	84	19	62.50
Arrow Sport		Kinner	K 5	100	90 BA 49	1	78.00
Bellanca	14 9 B	Ken Royce	5 F, 5 G	90	74 B 58	19	55.00
Bellanca	14 12 F 3	Franklin	6 AC 264 F 3	120	74 CF 57	4	55.00
Bellanca	14	Lenape		120	74 LN 60	19	50.00
Bellanca	Cruisair	Franklin	6 A4 150 B3	150	74 RR 66	20	50.00
Bird	B W	Warner	Scarab	125	90 BA 45	1	78.00
Bird	C J	Jacobs	L A 1	170	96 B	14	90.00
Bird	B K	Kinner	K 5	100	90 BA 49	1	78.00
Bird	C K	Kinner	R 5	125	90 D 67	18	80.00
Boeing	PT 13, N2 S 5	Lycoming	R 680 11	220	98 AA 64, 98 AA 66	5	90.00
Boeing	PT 17, N2 S 3, A 75N-1	Continental	R 670 5	220	98 AA 64, 98 AA 68	5	90.00
Boeing	PT 17, N2 S 3, A 75N-1	Continental	R 670 5	220	98 AB 64, 98 AB 68	15	90.00
Boeing	PT 17, N2 S 3, A 75N-1	Continental	R 670 5	220	98 AC 64, 98 AC 68	10	90.00
Buhl	LA 1, LA 1 B	Szekeley	SR 3	45	755	17	42.50
Call Air	A	Lycoming	O 235	100	74 FE 44, 74 FE 46	4	50.00
Cessna	120, 140	Continental	C-85	85	74 FC 49	9	50.00
Cessna	120, 140	Continental	C-85	85	74 FK 49	22	50.00
Cessna	AW	Warner	Scarab	125	90 BA 51	1	78.00
Cessna	Airmaster C 145	Warner	Super Scarab	145	82 R 81	13	72.50
Cessna	Airmaster C 145	Warner	Super Scarab	145	82 RA 81	2	72.50
Cessna	Airmaster C 165	Warner	Super Scarab	165	82 RA 81	2	72.50
Cessna	UC 78, T 50, AT-17	Jacobs	L 4 MB	225	90 JA 81	5	90.00
Commandaire	3 C 3 A	Warner	Scarab	125	90 BA 45	1	78.00
Commandaire	3 C 3 B	Siemens	SH 14	113	96 T 69	1	85.00
Commonwealth	Skyranger	Continental	C-85	85	74 FC 46	9	55.00
Commonwealth	Skyranger	Continental	C-85	85	74 FK 46	22	50.00
Culver	L C A	Continental	A 75	75	70 A 52, 70 A 54	9	40.00
Culver	L F A	Franklin	4 AC 176 F 3	80	70 AF 54, 70 AF 56	4	40.00
Culver	L F A	Franklin	4 AC 176 D 3	80	70 AF 52	4	40.00
Culver	Dart GK, G	Leblond	5 F	90	78 R 54	19	55.00
Culver	Dart GW	Warner	Scarab Jr	90	78 RW 63	13	55.00
Curtiss	Robin	Curtiss	OX 5	90	102	1	90.00
Curtiss	Robin	Tank	Y 502, V 470	115	96 T 69	1	85.00
Curtiss Wright, Jr.	C W 1	Szekeley	S R 3	45	755 L	17	45.00
Davis	V 3, D 1	Leblond	5 DE 70	70	84	19	62.50
Davis	D 1 66	Leblond	5 DF, 5 F	85	78 R 52	19	55.00
Davis	DIK	Kinner	K 5	100	90 BA 49	1	78.00
Davis	DIW	Warner	Scarab	125	90 BA 45	1	78.00
D H Moth	60 GM	DeHavilland	Gipsy	85-90	84 D L	18	62.50



## ASSEMBLY and INSPECTION

The assembly area encompasses several types of assembly work. Because of the variance in overhaul and repair jobs, practical equipment and licensed personnel is ready at all times to expertly perform the work involved. Rigid inspections are made while a job is in process and after the job has been completed. On all major overhauls, the airplane is given a careful pre-flight inspection and all other preparations necessary for the test flight. A competent test pilot makes the flight and prepares a complete report of discrepancies so that the airplane can be adjusted and made ready for the owner's acceptance.

## BRAKE and STRUT

Complete facilities for the overhaul of all types of Brakes and Struts are available at Pacific Airmotive. Our service includes the turning of Brake Drums, checking the concentricity of Brake Shoes and the overhaul and repair of Master Cylinders and Wheel Cylinders. We are equipped to efficiently handle the overhaul of all Landing Gear Struts including the replacement of seals and chevrons, a piston check, and the pressure testing of all overhauled units.

