# ASSEMBLY MACHINE AIR MOTORS

Sizes 1801P2, 1801Q2, 1801U2 and 1801W2 Nonreversible Sizes 1811P2, 1811Q2,

1811U2 and 1811W2 Nonreversible with Offset Head Sizes 1841P2, 1841Q2, 1841U2 and 1841W2 Reversible Sizes 1851P2, 1851Q2,

1851U2 and 1851W2 Reversible with Offset Head

### MAINTENANCE TOOLS

TOOL NUMBER FOR ORDERING	TOOL NAME FOR ORDERING	OPERATION
P25-228	Grease Gun	Inserting grease into the Gear Case (28), the Offset Gear Housing (44) and Spring Loading Attachment Housing (65).
38823	Bearing Inserting Tool	Installing the Spindle Planet Gear Bearings (35) in the Spindle Planet Gears (34) in all Sizes, and the Gear Head Planet Gear Bearings (24) in the Gear Head Planet Gears (23) in "Q" and "U" ratio Motors.

### HOW TO ORDER

Order all repair parts for your Ingersoll-Rand Tool by the NAME and NUMBER shown in the Repair Part List section. Never use the illustration numbers which appear in the first column.

For prompt service and genuine Ingersoll-Rand parts, place orders with the nearest Ingersoll-Rand Office or Authorized Distributor.

Notice: The use of other than genuine Ingersoll-Rand replacement parts may result in decreased tool performance and increased maintenance, and may, at the Company's option, invalidate all warranties.

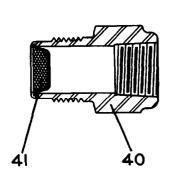
Refer All Communications to the Nearest Ingersoll-Rand Office or Distributor.

©Ingersoll-Rand Company 1978

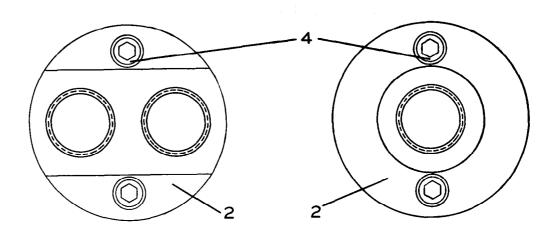
Printed in U.S.A.



Form P5929 **Edition 6** July, 1978

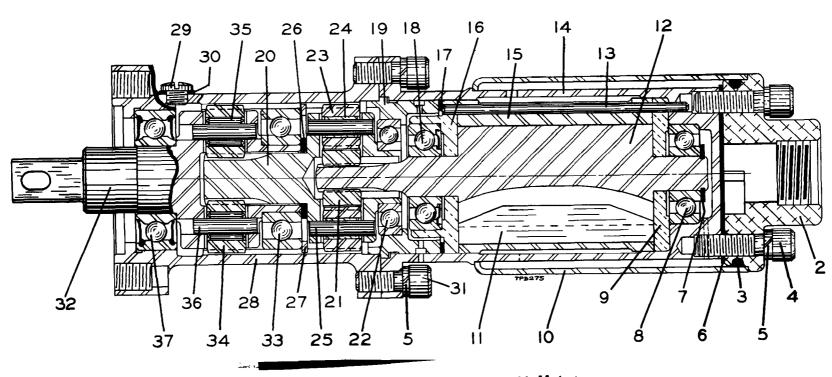


AIR STRAINER



BACK HEAD USED ON REVERSIBLE MOTORS

BACK HEAD USED ON NON-REVERSIBLE MOTORS



2 -- 1904 or 1841 Assembly Machine Air Motor

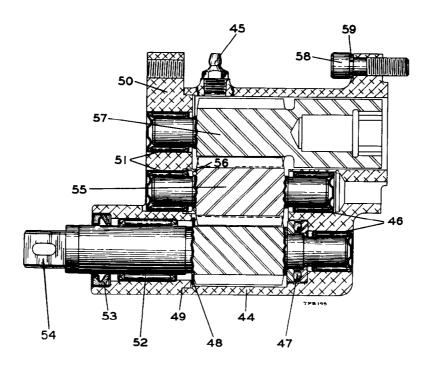
### PART NUMBER FOR ORDERING -

## PART NUMBER FOR ORDERING-

<del></del>					<u> </u>
2	Backhead		24	Gear Head Planet Gear Bushing (2) (For "P" ratio)	R1AH-500
	For Series 1801 and 1811	R1801-102	25	Gear Head Planet Gear Shaft (2)	R1A-191
	For Series 1841 and 1851	R1841-102	26	Gear Head Spacer	R1AP-80
3	Exhaust Deflector Seal	R10V-310	27	Spindle Bearing Retainer	R1AP-118
4	Backhead Cap Screw (2)	510-638	28	Gear Case	R1801P-37
5	Lock Washer (4)	8U-58	29	Grease Plug	R00A-95
6	Backhead Gasket		30	Grease Plug Washer	R3-92A
	For Series 1801 and 1811	R1801-283	31	Gear Case Cap Screw (2)	G57T-634
	For Series 1841 and 1851	R1841-283		Spindle Assembly	
7	Rotor Bearing Retainer	404-118		For "P", "Q" or "U" ratio	
• 8	Rear Rotor Bearing	R1-24		with No. R1801P-8 Spindle	R1801P-A8
9	Rear End Plate	R1801-12A		with No. R1801P-308-1 Spindle	R1801P-A308-1
<b>*</b> 10	Exhaust Deflector	R1801-23		For "W" ratio	
• 11	Vane Packet (Set of 5)	R1801-42-5		with No. R1801W-8 Spindle	R1801W-A8
12	Rotor			with No. R1801W-308-1 Spindle	R1801W-A308-1
	For "P", "U" or "W" ratio (7 teeth)	R1801P-53	32	Spindle	KIOOIW-ASOO-I
	For "Q" ratio (11 teeth)	R1801Q-53	""	For "P", "Q" or "U" ratio	
13	Cylinder Dowel	R18-98		1/2" square drive (standard)	R1801P-8
<b>*</b> 14	Motor Housing	R1801-40		1/2" square drive (standard)	R1801P-308-1
15	Cylinder			For "W" ratio	
	For Series 1801 and 1811	R1801-3		5/8" square drive (standard)	R1801W-8
	For Series 1841 and 1851	R1841-3		5/8" square drive (1" longer than standard)	R1801W-308-1
16	Front End Plate	R1801-11	• 33	Spindle Rear Bearing	R1AP-97
17	End Plate Gasket	R1801-739	34	Spindle Planet Gear (3)	
• 18	Front Rotor Bearing	R1-24A		For "P", "Q" or "U" ratio (17 teeth)	R1801P-9
19	Bearing Cage	R1801-113		For "W" ratio (19 teeth)	R1801W-9
	Gear Head Assembly		35	Spindle Planet Gear Bearing (3)	R1AL-645
	For "P" ratio	R1801P-A216	36	Spindle Planet Gear Shaft (3)	R1801-190
	For "Q" ratio	R1801Q-A216	• 37	Spindle Front Bearing	4UA9-593
	For "U" ratio	R1801U-A216	40	Air Strainer (1 for Series 1801 or 1811; 2 for Series	
	For "W" ratio	R1801W-A216		1841 or 1851)	R18-465A
20	Gear Head		41	Air Strainer Screen (1 for each strainer)	402-61
	For "P" ratio	R1801P-216		Offset Head Assembly	
	For "Q" ratio	R1801Q-216		For "P", "Q" or "U" ratio	R1811P2-A147
	For "U" ratio	R1801U-216		For "W" ratio	R3810P2-A147
	For "W" ratio	R1801W-216	44	Offset Gear Housing	R3810-147
21	Rotor Pinion (For "P" ratio) (21 teeth)	R1801P-17	45	Grease Fitting	23-188
22	Gear Head Bearing	4E-510	• 46	Gear Housing Bearing (Torrington No. M9121	25-100
23	Gear Head Planet Gear (2)	4D 310	- 70	or its equivalent) (2)	R3810-143
23	For "P" ratio (14 teeth)	R1801P-10	• 47	Socket Driver Thrust Bearing (Norma-Hoffman	K3010-143
	For "Q" ratio (19 teeth)	R18010-10	'		D2010 106
	For "U" or "W" ratio (21 teeth)	R1801U-10	10	DL-15 or its equivalent)	R3810-105
24	Gear Head Planet Gear Bearing (2) (For "Q",	V 1001 0-10	48 49	Socket Driver Thrust Washer	R3810-706
47		DIAT CEA	50	Gear Housing Cover Gasket	R3810-592
	or w ratio)	R1AL-654	ll 20	Offset Gear Housing Cover	R3810-148

<sup>\*</sup> IMPORTANT: The complete size symbol stamped on these parts must be stated when ordering a replacement Motor Housing or Exhaust Deflector.

<sup>•</sup> To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.



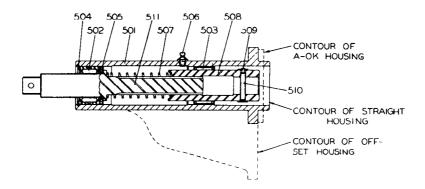
Offset Head Assembly

PART NUMBER FOR ORDERING			PART NUMBER FOR ORDERING		
• 51	Gear Housing Cover Bearing (Torrington		57	Drive Gear	
	No. M9121 or its equivalent) (2)	R3810-143		For "P", "Q" or "U" ratio	R1811-146
• 52	Socket Driver Front Bearing (Torrington			For "W" ratio	R3810-146
	No. B-1316 or its equivalent)	R3810-593	*	Housing Cover Small Cap Screw (2)	510-638
• 53	Socket Driver Seal	R3810-271	*	Housing Cover Large Cap Screw (2)	R3810-126
54	Socket Driver		*	1/4" Lock Washer (2)	8U-58
	1/2" Square Drive	R1811-145-1/2	*	5/16" Lock Washer (2)	34U-58
	5/8" Square Drive	R3810-145-5/8	58	Housing Cap Screw (2)	
55	Intermediate Gear		59	5/16" Lock Washer (2)	
56	Intermediate Gear Spacer				ļ

<sup>\*</sup> Not illustrated.

<sup>•</sup> To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

# **SPRING LOADING ATTACHMENTS**



## **GUIDED SPRING LOADING ATTACHMENTS**

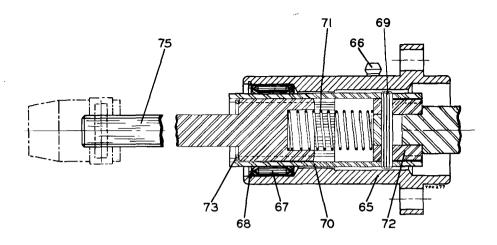
These are new Spring Loading Attachments. Before ordering repair parts for an Attachment now in service, make certain you have properly identified that Attachment.

Repair parts for the superseded Spring Loading Attachments remain available.

		PART NUMBER I	OR ORDERING
· 		For "P", "Q" or "U" ratio	For "W" ratio
	Guided Spring Loading Attachment		
	Standard Length Driver; Straight Housing	R1801-A504-1	R3800-A504-1
	1" Extended Driver; Straight Housing	R1801-A504-2	R3800-A504-2
	2" Extended Driver; Straight Housing	R1801-A504-3	R3800-A504-3
	Standard Length Driver, Offset Housing	R1811-A504-1	R3810-A504-1
	1" Extended Driver; Offset Housing	R1811-A504-2	R3810-A504-2
	2" Extended Driver; Offset Housing	R1811-A504-3	R3810-A504-3
	Standard Length Driver; A-OK Housing	R1801-A604-1	R3800-A604-1
	1" Extended Driver; A-OK Housing	R1801-A604-2	R3800-A604-2
	2" Extended Driver; A-OK Housing	R1801-A604-3	R3800-A604-3
501	Housing Assembly		
	Straight Housing	R3800-A505	R 3800-A505
	Offset Housing	R3810-A505	R 3810-A505
	A-OK Housing	R3800-A605	R3800-A605
• 502	Driver Front Bearing (Torrington B-1812)	R3800-509	R3800-509
• 503	Driver Rear Bearing (Torrington HF-142212)	R3800-510	R3800-510
504	Snap Ring	R3800-508	R3800-508
505	Driver Thrust Plate	R3800-511	R3800-511
506	Grease Fitting	R1-188	R1-188
507	Spring	R3800-127	R3800-127
508	Coupling	R1801-506	R3800-506
509	Pin Retainer	R3800-628	R3800-628
510	Coupling Pin	MP1-15A	MP1-15A
511	Driver		
	Standard Length	R1800-507-1	R3800-507-1
	1" Extension	R1801-507-2	R 3800-507-2
	2" Extension	R1801-507-3	R3800-507-3

<sup>•</sup> To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

# SUPERSEDED SPRING LOADING ATTACHMENT For Size 1801P2, 1801Q2, 1801U2, 1841P2, 1841Q2 or 1841U2 Motor

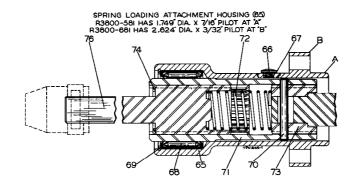


### PART NUMBER FOR ORDERING

65	Spring Loading Attachment Housing	R1801-581
66	Grease Fitting	R1-188
• 67	Spindle Sleeve Bearing (Torrington No. B1910 or its equivalent)	R1801-606
68		R1801-6
69	Spindle Pin	R1801-15
70		R1801-304
71		R1801-127
72	Drive Collar (New Style)	R1801-306
73		R1801-119
75	Socket Driver	
	New Style with Integral Drive Collar	
	1" Extension	R1801-407-
		R1801-407-
		R1801-407-

<sup>•</sup> To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

## SUPERSEDED SPRING LOADING ATTACHMENTS For Size 1801W2 or 1841W2 Motor



## PART NUMBER FOR ORDERING -

65	Spring Loading Attachment Housing	
	With Pilot at "A" (see illustration)	00-581
		00-681
66	Grease Plug	A-95
67	Grease Plug Washer	2A
● 68	Spindle Sleeve Bearing (Torrington No. B2416 or its equivalent) BU-4	66
69	Sleeve Bearing Retainer	)0-6
70	Spindle Pin	00-15
71		00-304
72		00-127
73		00-306
74		00-120
76	Socket Driver (New Style with Integral Drive Collar)	
	1" Extension	00-407-1
		00-407-3

<sup>•</sup> To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

Hente, Ge. 111 Ingersoll-Rand Drive Chambles, Georgia 30341 \*Seton Rouge, Le. 70816 4152 Rhodg Drive \*Birminghem, Ale. 35233 1516 Second Ave., South \*Beston, Mess. 2 Kuniholm Dr. Holliston, Mass. 01746 \*Beffelo, N. Y. 14225 195 Sugg Rd. eCheriotte, N. C. 28208 4840 Wilmont Rd. \*Chetteneoga, Tenn. 37407 1936 Central Ave.

eChicege, III.
888 Industrial Drive
Elmhurst, Illinois 60126
\*Clacinerit, Ohie
666 Redno Terroce
Woodlown, Ohio 45215
\*Cleveland, Ohio 44125
9257 Midwest Ave.
\*Corpus Christi, Texas 78408
4540 Baldwin Blvd.
Pages 75247 elies, Texas 75247 8901 Directors Ro \*Denver, Colo. 80207 5805 E. 39th Ave. Detroit, Mich.
 22122 Telegraph Road
 Southfield, Mich. 48075

Ingersoll-Rand® Tool & Hoist Division 28 Kennedy Bivd. East Brunswick, N. J. 08816 \*Freeport, Texas 77541 211 Park Place Hertford, Conn.
 60 Progress Drive
 Manchester, Conn. 06040 ouston, Texes 77001 6800 Sands Point, P.O. 1455

dianapolis, Ind. 46268 5315 West 86th St.

Calif. 90022 5533 East Olympic Blvd. Milwaukee, Wis.
 N84 W13540 Leon Rd.
 Menomonee Falls, Wis.
 53051 \*Minneapolis, Minn. 55404 Corner Franklin & Cedar

\*Newerk, N. J. 28 Kennedy Blvd. East Brunswick, N. J. 08816 eNew Orleans, La. 70005 939 Lake Ave. Metairie \*Peorie, III. 61614 1809 West Chanute Rd. ePhiledelphia, Pa.
651 Park Ave.
King of Prussia, Pa. 19406 Pittsburgh, Pa. 15220
6 Parkway Ctr.

Port Arthur, Texas 77640
5336 Twin City Highway \*Moline, III. 61265 3901 25 St. \*Portland, Oregon 97214 240 S. E. Clay St.

\*Richmond, Va. 23230 3431 West Leigh St. \*Sen Francisco, Calif. 14299 Wicks Blvd. Son Leandro, Calif. 94577 •Seattle, Wash. 98188 345 Andover Park East \*Shreveport, La. 71106 450 W. 61st St. eSt. Louis, Mo. 63132 1515 Page Industrial Blyd. \*Tempe, Fla. 33609 3316 South Westshore Blvd. Washington, D. C. 20006 1666 K. St., N. W.

Calgary, Alberta, T2R 0E1 611 11th Ave., S. W.

setraal, Quebec 620 Cathcart St., H3B 1M2 P.O. Box 1148, H3B 3K9

Branch and All Star® Servicenter.
 All Star Servicenter only.

All Star Servicenter.

eSherbrooke, Quebec, J1H 3X4 375 Courcelette St.

dbury, Ontario, P3A 3T3 P.O. Box 2220

CANADA

Canadian Ingersoll-Rand Co., Limited Montreal, Quebec 620 Cathcart St., H3B 1M2 P.O. Box 610, Station B H3B 3K3

Don Mills, Ontario M3B 2V1 255 Lesmill Road

eVancouver
British Columbia, V6A 2W7
1695 Main St. Winnipeg, Manitobe, R3H 0M6 1234 Border St.

5-G7

#### **AUTONOMOUS COMPANIES**

Argentina, Buenos Aires Ingersoll-Rand Argentina S.A.I.v C. S.A.I.y C.
Casilla Correo 2412, Correo Central Australia, South Melbourne Ingersoll-Rand (Australia) Ltd. P.O. Box 219

42 Moray Street, 3205 Victoria Austria A 1120, Vienna Ingersoll-Rand Ges M.B.H. Schoenbrunnerstrasse 213-215/2/5

Belgium, Diegem (Brussels) Ingersoll-Rand Benelux S.A. Kouterveldstraat 10-12, 1920 Diegem

Brazil, Sao Bernardo Ingersoll-Rand S.A. Ind. e Com. Caixa Postal 911

Chile, Santiage Ingersoll-Rand Chile Morande 341 Casilla 126-D

Colombia, Bogota Macquinarias Ingersoll-Rand de Colombia, S.A. Apartado Aero 7451

Denmark, Albertslund DK2620 Ingersoll-Rand AB Herstedvang 11

Egypt, Cairo Ingersoll-Rand North East Africa P.O. Box 820 23A Ismail Mohamed St. Zamalek

Ingland, London, SW1X, 7LU
Ingersoll-Rand Co., Ltd.
Bowater House, Knightsbridge
France, 78 190 Trappes Yvelines
Compagnie Ingersoll-Rand
Avenue Albert Einstein

Zone Industrielle Germany, 403 Ratingen

Ingersoll-Rand GmbH Robt. Zapp Str. 7 Postfach 1380 Greece, Athens 610

Ingersoll-Rand Central Middle East 17th Floor Athens Tower

17th Floor Athens Tower Mesogion 2-4 Hong Kong Ingersoll-Rand Far East 19th Floor, Lap Heng House 50, Gloucester Road India, Bombay 400018 Ingersoll-Rand (India) Private Ltd. 44 Maulana Abdul Gaffar Rd. P.O. Box 16564, Worli Iran. Tehran

Iran, Tehran Ingersoll-Rand Iran P.O. Box 12-1538

Ireland, Dublin

Ingersoll-Rand Company (Ireland) Ltd. John F. Kennedy Drive

Italy, 20100 Milano

Ingersoll-Rand Italiana, S.p.A. Strada Provinciale Cassanese Caselle Postale 1232 Vignate, Italy

Japan, 106 Tokyo Ingersoll-Rand (Japan) Ltd. Kowa Bldg. No. 17 2-7 Nishi-Azabu 1-Chome Minato-Ku

Kenya, Nairobi Ingersoll-Rand Mid Africa P.O. Box 14240

Malaysia, Petaling Jaya Ingersoll-Rand Malaysia, Sdn, Bhd. P.O. Box No. 125

Mexico, 10 D.F. Mexico Ingersoll-Rand S.A. de C.V. Apartado 41-666

Netherlands, Zoeterwoude Ingersoll-Rand Benelux N.V. P.O. Box 33, Zoeterwoude

Norway, Oslo 1 Ingersoll-Rand AB P.O. Box 143-Sentrum Peru, Lima Ingersoll-Rand Co. of Peru, S.A. Casilla 2261

Philippines, Makati, Rizal 3117 Ingersoll-Rand Philippines, Inc. P.O. Box 445 MCC

Portugal, Lisbon 5 Ingersoll-Rand Lda. Apartado 2933 Puerto Rico, San Juan 00936 Ingersoll-Rand de Puerto Rico Inc. G.P.O. Box 1222

Singapore 22 Ingersoll-Rand Southeast Asia (Pte.) Ltd. G.P.O. Box 2062, Singapore 1

South Africa, Alberton Ingersoll-Rand Co. S.A. (Proprietary) Ltd. P.O. Box 3720 Alrode, 1451

Spain, Madrid Cia. Ingersolf-Rand, S.A. Apartado 518

Sweden, Bromma Ingersoll-Rand A.B. S-16125 Bromma 1

Venezuela, Caracas Ingersoll-Rand de Venezuela S.A. Apartado 70588, Los Ruices

5-G7

# **AUTHORIZED I-R SALES AND SERVICE**

Distributors in principal cities throughout the world. Contact the nearest Ingersoll-Rand office for the name and address of the distributor in your country or write to Ingersoll-Rand International, Woodcliff Lake, New Jersey.