PARTS LIST For

"PROMAXX™" Spike Driver Models: MX60–SD & MX90–SD

INGERSOLL-RAND®
CONSTRUCTION & MINING

Ingersoll-Rand Company, Rock Drill Division 7500 Shadwell Drive, Roanoke, Va. 24019-5198 U.S.A.







Rock Drill Division

Certified ISO-9001 (ANSI/ASQC Q91)
Certification No. QSR-80

Refer All Communications To The Nearest Address Listed On The Back Cover.



"PROMAXX™" Series Paving Breakers

"PROMAXX™" Series Paving Breaker

Warranty Policy Statement

INGERSOLL-RAND COMPANY WARRANTS THAT ITS "PROMAXX®" SERIES PAVING BREAKERS ARE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR THE FOLLOWING PERIODS:

A. MAIN BREAKER HOUSING & FRONTHEAD CASTING

3 VEARS

B. ALL OTHER COMPONENTS:

1 YEAR

SHOULD AN INGERSOLL-RAND "PROMAXX®" SERIES PAVING BREAKER PROVE DEFECTIVE DURING THE SPECIFIED WARRANTY PERIODS, INGERSOLL-RAND WILL REPLACE OR REPAIR IT FREE OF CHARGE.

THIS WARRANTY DOES NOT APPLY TO NORMAL WEAR AND TEAR, OR TO UNITS THAT HAVE BEEN MODIFIED, MISUSED, OR REPAIRED IN A MANNER NOT APPROVED BY INGERSOLL-RAND COMPANY. THE OPINION OF INGERSOLL-RAND IN DETERMINING COMPLIANCE WITH THE AFOREMENTIONED CONDITIONS WILL BE FINAL.

Ingersoll-Rand Company

Limitation of Liability

THE REMEDIES OF THE USER SET FORTH UNDER PROVISIONS OF WARRANTY OUTLINED ABOVE ARE EXCLUSIVE AND THE TOTAL LIABILITY OF INGERSOLL—RAND OR ITS DISTRIBUTORS WITH RESPECT TO THIS SALE OR THE EQUIPMENT AND SERVICE FURNISHED HEREUNDER, IN CONNECTION WITH THE PERFORMANCE OR BREACH THEREOF, OR FROM THE SALE, DELIVERY, INSTALLATION, REPAIR OR TECHNICAL DIRECTION COVERED BY OR FURNISHED UNDER THIS SALE. WHETHER BASED ON CONTRACT, WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHERWISE SHALL NOT EXCEED THE PURCHASE PRICE OF THE UNIT OF EQUIPMENT UPON WHICH SUCH LIABILITY IS BASED.

INGERSOLL-RAND, ITS SUPPLIER(S) AND ITS DISTRIBUTORS SHALL IN NO EVENT BE LIABLE TO THE USER, ANY SUCCESSORS IN INTEREST OR ANY BENE-

FICIARY OR ASSIGNEE RELATING TO THIS SALE FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPE-CIAL OR PUNITIVE DAMAGES ARISING OUT OF THIS SALE OR ANY BREACH THEREOF, OR ANY DEFECTS IN. OR FAILURE OF, OR MALFUNCTION OF THE EQUIP-MENT UNDER THIS SALE WHETHER BASED UPON LOSS OF USE, LOST PROFITS OR REVENUE, INTEREST, LOST GOODWILL, WORK STOPPAGE, IMPAIRMENT OF OTHER GOODS, LOSS BY REASON OF SHUTDOWN OR NON-OPERATION, INCREASED EXPENSES OF OPERA-TION OF THE EQUIPMENT, COST OF PURCHASE OF RE-PLACEMENT POWER OR CLAIMS OF USERS OR CUS-TOMERS OF THE USER FOR SERVICE INTERRUPTION WHETHER OR NOT SUCH LOSS OR DAMAGE IS BASED ON CONTRACT, WARRANTY, NEGLIGENCE, INDEMNITY, STRICT LIABILITY OR OTHERWISE.

INDEX "PROMAXX™" Spike Driver

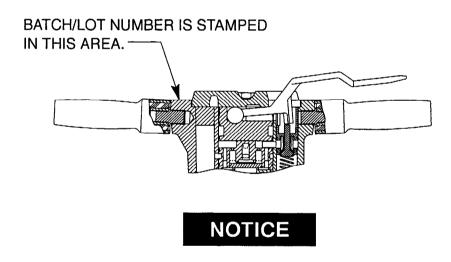
PL6119 Intro-1 Page 1 of 2

ORDERING INSTRUCTIONS

When ordering service parts, please specify:

- 1. The **NAME** of each part as listed.
- 2. The PART NUMBER as listed or stamped on the part.
- 3. The **BATCH/LOT NUMBER** of the equipment.

DO NOT use illustration numbers when ordering service parts. To save time, send all orders for parts to the nearest branch office or agent. IF IT IS NECESSARY TO SEND ANY PART OF THIS EQUIPMENT TO THE FACTORY, INQUIRE AT OUR NEAREST BRANCH OFFICE OR AGENT FOR SPECIAL INSTRUCTIONS.



SAVE THESE INSTRUCTIONS. DO NOT DESTROY.

The use of service parts other than those included within the Ingersoll-Rand[®] approved parts list may create hazardous conditions over which Ingersoll-Rand[®] Company has no control. Therefore Ingersoll-Rand[®] Company cannot be held responsible for equipment in which non-approved repair parts are installed.

All information, illustrations, and specifications in this parts list are based on the latest information available at the time of publication. Product improvement is a continuing goal at Ingersoll–Rand[®]. Design and specifications are subject to change without notice or obligation.

When the life of the tool has expired, it is recommended that the tool be disassembled, degreased and parts be separated by material so that they can be recycled.

NAME OF ASSEMBLY Components of an assembly are indented

Each column includes the Parts List Section Numbers applicable to the assembly.

are indented.	Manual No.	Section No.
Introduction	PL6119	1
"PROMAXX™" Spike Driver Models MX60-SD & MX90-SD	PL6119	2
General Information	PL6119	3

INTRODUCTION

July 11, 1995

Page 1 of 2

Alphabetical Index

<u>Title</u>	Page No.
Introduction	1
Safety First	
Safety Precautions	

1. INTRODUCTION.

This parts list contains service part numbers, general model information and important safety information for the "PROMAXX^{TM"} Spike Driver Models MX60–SD & MX90–SD (hereafter referred to as spike driver).

2. SAFETY FIRST.

SAFETY FIRST is the primary concern for the protection of both, personnel and the spike driver during any phase of operation. All personnel must thoroughly understand all safety precautions before operating or doing any maintenance work on the spike driver.

3. SAFETY PRECAUTIONS.

The Safety Precautions listed are intended to make all personnel aware of the hazards while working on or near a spike driver. All personnel must use common sense and a good working practice while operating and maintaining these spike drivers. The safety precautions listed are of a general nature and cannot cover every possible situation:

a. Always wear approved hard hat, safety shoes, safety glasses, respirator

and ear protection when near a spike driver in operation. Failure to wear approved safety equipment could result in bodily injury.

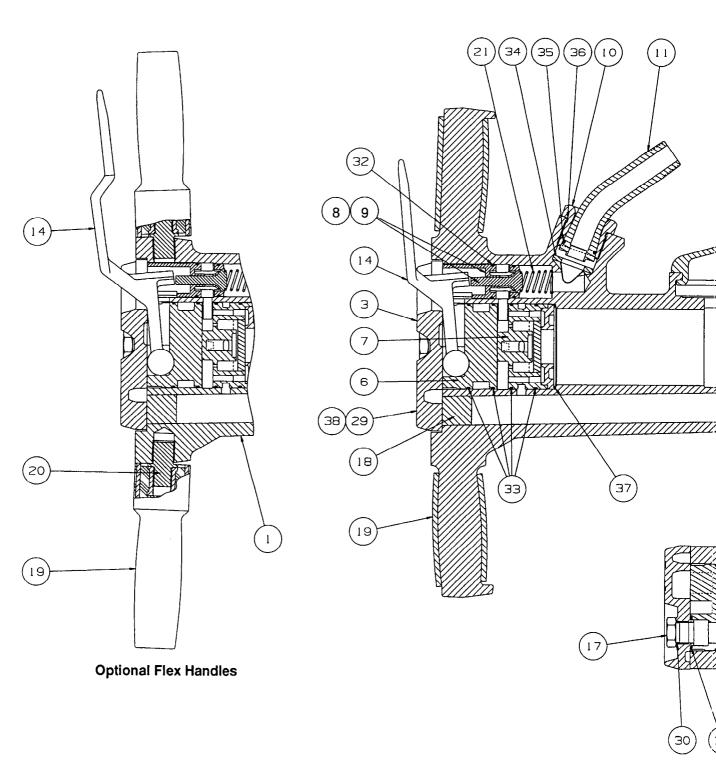
- b. Use only Ingersoll-Rand® replacement parts.
- c. Prolonged exposure to excessive noise levels without the use of proper ear protection can result in permanent hearing loss.
- d. DO NOT indulge in horseplay. Distractions can cause accidents.
- e. Keep your hands off the throttle lever until it is time to start driver operation.
- f. Maintain a steady balance at all times.
- g. Never put your face close to the spike driver.
- h. Never rest the spike driver on your foot.
- i. Never point the spike driver at anyone.
- j. Never start the spike driver when it is lying on the ground.
- k. Compressed air is dangerous.
 Never point an air hose at yourself or

- co-workers. Never blow your clothes free of dust with compressed air.
- I. Be sure all hose connections are tight. A loose hose not only causes leaks, but it may come completely off the driver, whip around, and injure the operator and others in the area. Attach safety cables to all hoses to prevent injury if a hose is accidentally broken.
- m. Never disconnect a pressurized air hose. Before disconnecting a hose, shut-off the air at the compressor and bleed the spike driver.
- n. Always keep both hands on the handle while operating the spike driver.

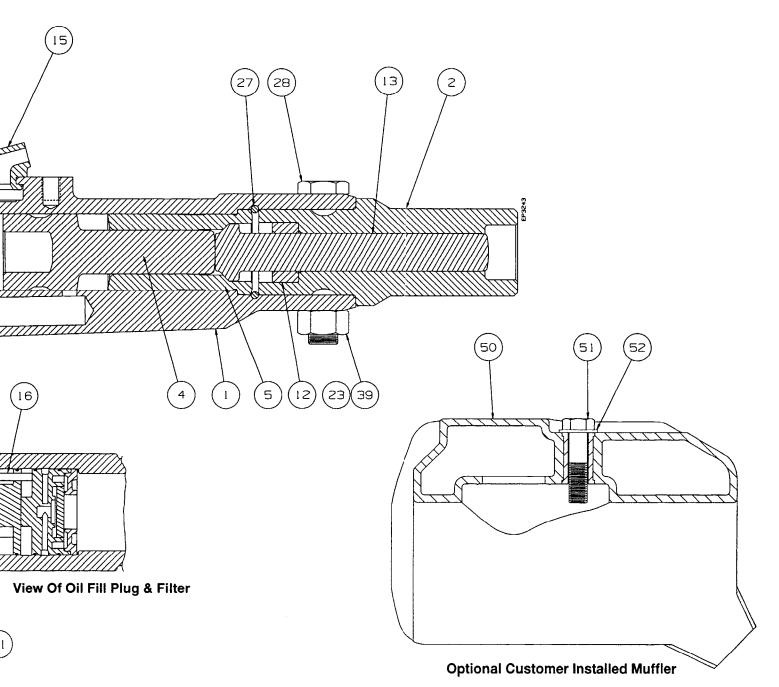
- o. DO NOT "ride" the spike driver with one leg over the handle. The operator can be injured if the tool breaks while he is riding the spike driver.
- p. When using any solvent to clean parts, make sure that it meets current safety and health standards and that it is used in an area that is adequately ventilated.
- q. DO NOT operate the spike driver without a properly installed oil filter and oil fill plug.
- r. DO NOT lift or transport the spike driver by the throttle lever. Damage may occur.



July 11, 1995



Spike Driver Models (For



MX60-SD & MX90-SD - Sectional Illustration Parts List, refer to Pages 2 & 3)

"PROMAXX[™]" Spike Driver Models MX60–SD & MX90–SD (For Illustration of parts, refer to Page 1)

REF NO.	PART NO.	NAME OF PART Parts indented under an item are included with that item.	QTY.	REMARKS
	##	"PROMAXX [™] " Spike Driver Models MX60–SD & MX90–SD		
1	NSS	HOUSING	1	MX60-SD MODELS
1	NSS	HOUSING	1	MX90-SD MODELS
2	51986487	FRONTHEAD	1	
3	51943447	BACKHEAD	1	
4	51999720	PISTON	1	MX60-SD MODELS
4	51948388	PISTON	1	MX90-SD MODELS
5	52080751	SEAT, PISTON	1 1	MX60-SD MODELS
5	51986677	SEAT, PISTON	1	MX90-SD MODELS
6	51949857	PLUG, HOUSING	1	ATT TO THE STATE OF THE STATE O
	51955391	KIT, VALVE CHEST	1 1	MX90-SD MODELS
† 7	51955417	.ASSEMBLY, VALVE CHEST	1	
8 8	NSS	BODY, THROTTLE		
88 9	NSS	VALVE, THROTTLE	1	
	52082682	KIT, VALVE CHEST		MX60-SD MODELS
+ 7	52080694	.ASSEMBLY, VALVE CHEST	1	
8	NSS	BODY, THROTTLE	1 1	
9 10	NSS E1261709	VALVE, THROTTLE	1	
11	51361798 51361863	CAP, AIR CONNECTION NIPPLE, SWIVEL	1 1	
12	51989598	DAMPER		
13	51986495	BLOCK, HAMMER		
14	51943017	LEVER, THROTTLE		MX60/MX90-SD
14	51955565	LEVER, THROTTLE		MX60F/MX90F-SD
15	51729036	DEFLECTOR, EXHAUST		11/1/1001 /14///1001 00
† 1 16	51945111	FILTER	1 1	
17	51370203	PLUG, OIL FILL	1	
18	51983666	PLUG, RUBBER	i	MX60-SD MODELS
18	51944007	PLUG, RUBBER	1	MX90-SD MODELS
19	51952869	SLEEVE, HANDLE	2	MX60/MX90-SD
19	51910255	HANDLE, FLEX	2	MX60F/MX90F-SD
20	51913440	CONNECTOR, FLEX HANDLE	2	MX60F/MX90F-SD
88 21	51368561	SPRING	1	
23	52080736	WASHER, FRONTHEAD	1	MX60-SD MODELS
23	51378438	WASHER, FRONTHEAD	1	MX90-SD MODELS
27	51954337	RING, RETAINING	1	MX60-SD MODELS
27	51955862	RETAINER	1	MX90-SD MODELS
28	95749537	BOLT, FRONTHEAD	1	MX60-SD MODELS
28	95379608	BOLT, FRONTHEAD	1	MX90-SD MODELS
29	95214995	CAPSCREW, BACKHEAD	4	
30	95209870	O-RING, OIL FILL PLUG	1	
18431	95018107	O-RING, BACKHEAD	1	
⊗ 32	95097705	O-RING, THROTTLE BODY	2	· · · · · · · · · · · · · · · · · · ·
† 4 33	03242559	SEAL	4	
34	51998367	STRAINER, AIR	1	
35	95086161	O-RING, SWIVEL NIPPLE	1	
36	95086112	O-RING, CONNECTION CAP	1_1_1	

(CONTINUED)

"PROMAXX[™]" Spike Driver Models MX60–SD & MX90–SD (Con't.) (For Illustration of parts, refer to Page 1)

REF NO.	PART NO.	NAME OF PART Parts indented under an item are included with that item.	QTY.	REMARKS
	##	"PROMAXX [™] " Spike Driver Models (Con't.) MX60–SD & MX90–SD		
† . 37 38 39 39	95086583 51948016 95477196 95471165		1 4 1	MX60-SD MODELS MX90-SD MODELS
	54000440	OPTIONAL EQUIPMENT (Furnished only when specially ordered)		
50 50 51 52	51982148 51953453 95054144 51948016	MUFFLER (FURNISHED W/BOLT & WASHER) MUFFLER (FURNISHED W/BOLT & WASHER) .BOLT, MUFFLER .WASHER, MUFFLER	1 1 1	MX60-SD MODELS MX90-SD MODELS
	35364322	LUBRICATOR, IN-LINE AVAILABLE KITS (Furnished only when specially ordered)	1	
	51955391 52082682 51955375	KIT, VALVE CHEST KIT, VALVE CHEST KIT, THROTTLE VALVE	1 1	MX90-SD MODELS MX60-SD MODELS
	:	LUBRICATION (Furnished only when specially ordered)	1	
	51378701 51378727 51378743	ROCK DRILL OIL (LIGHT) ROCK DRILL OIL (LIGHT) ROCK DRILL OIL (LIGHT)	1 GAL 5 GAL 55 GA	

NOTICE: REFER TO SECTION 3 FOR A LISTING OF ALL AVAILABLE SPIKE DRIVER MODEL

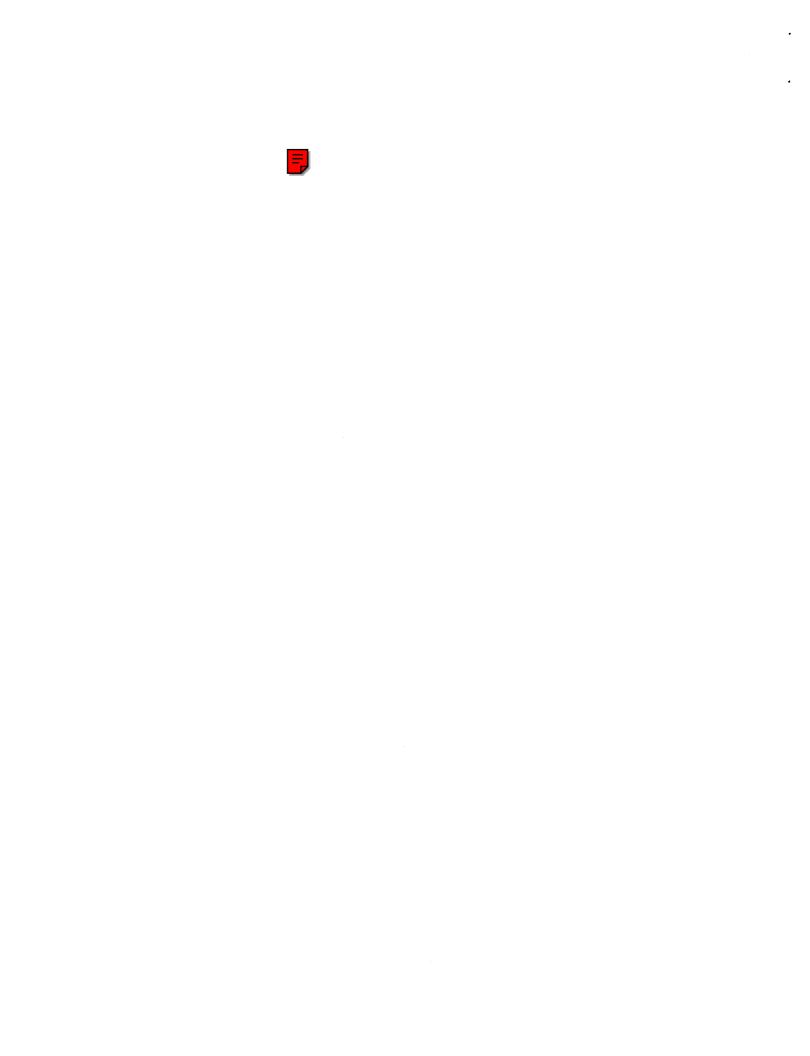
AND PART NUMBERS.

† NOTICE: THESE PARTS ARE INCLUDED IN VALVE CHEST KIT 51955391.

**NOTICE: THESE PARTS ARE INCLUDED IN VALVE CHEST KIT 52082682.

**NOTICE: THESE PARTS ARE INCLUDED IN THROTTLE VALVE KIT 51955375.

NSS NOTICE: THESE PARTS ARE NOT SOLD SEPARATELY.



.

GENERAL INFORMATION

Section 3

July 11,1995

Page 1 of 2

GENERAL.

The "PROMAXX[™]" Spike Driver Model MX60—SD is a medium-duty and the MX90—SD is a heavy-duty driver that provide maximum performance at minimum cost. They are designed for general spike driver work where their size and weight range is necessary. With the two—piece design (housing and fronthead) the drivers are easier to maintain with minimum disassembly.

STANDARD EQUIPMENT.

Each spike driver is a complete unit ready to be put into service with proper lubrication. There are no extra parts or special fittings required.

ŧ l

NOTICE

SPIKE DRIVER COMBINATIONS.

The following is a list of all available combinations (by model and part number) for all MX60-SD & MX90-SD Spike Drivers:

1) MX60 Models:

- a. MX60-SD (51997922)
- b. MX60F-SD (51997930)

2) MX90 Models:

- a. MX90-SD (51997948)
- b. MX90F-SD (51997955)

MUFFLER.

An add on muffler is available for drills without one.

The muffler assembly is used to reduce spike driver noise without hindering performance. This assembly is available for spike drivers that do not have a muffler.

LUBRICATION.

A high-quality rock drill oil conforming to the physical and chemical properties outlined in the instruction manual, must be added to the operating air supply to lubricate the moving parts of the spike drivers. The method of lubrication depends on actual operating conditions and customer preference:

ACAUTION

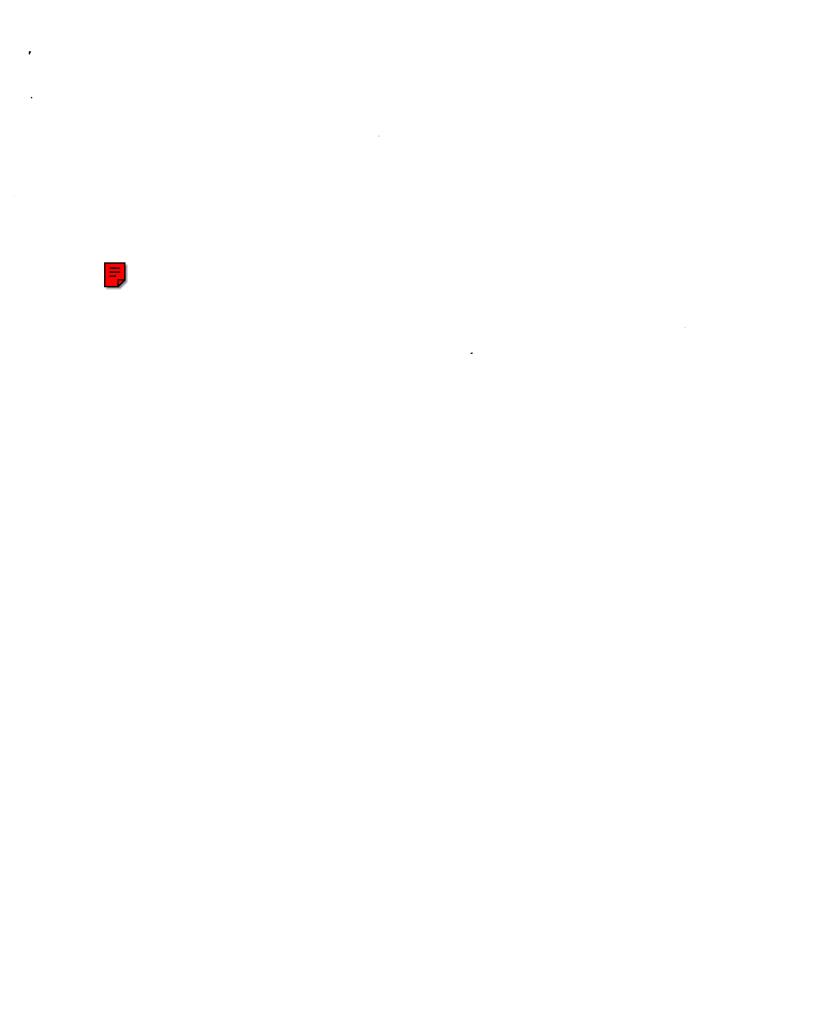
THE LUBRICATING OIL RESER-VOIR BUILT INTO THE HOUSING PLUG IN THE SPIKE DRIVER MUST BE CHECKED EVERY TWO HOURS AND REFILLED AS NEC-ESSARY.

- a. The lubricating—oil reservoir built in the housing plug will provide proper lubrication. It must be checked every two hours and refilled as necessary. Refer to the instruction manual listed below for instructions on how to fill the reservoir.
- b. For intermittent operation with an air—supply hose no longer than 50 ft. (15 m), a compressor—mounted lubricator can be used.

c. For continuous operation during an eight-hour shift, an Ingersoll-Rand lubricator Part Number 35364322, or other constant-feed air line lubricator, should be installed in the air-supply line about 11.5 ft. (3.5 m) from the breaker. The 35364322 has a capacity of 1 U.S. pint (0.47 liters) and will be furnished when specially ordered.

NOTICE

Refer to IM6119 "Instruction Manual For "PROMAXX™" Spike Driver Models MX60-SD & MX90-SD" for installation and operation instructions. Refer to RM6119 "Maintenance and Repair Manual For "PROMAXX™" Spike Driver Models MX60-SD & MX90-SD for maintenance and repair instructions.



Worldwide Ingersoll-Rand sales offices

U.S.A.

U.S. C&M OFFICES

Bethlehem, PA 18017-2293 1495 Valley Center Pkwy. 215/882-8800

Boston, MA 02125 33 Locust Street 617/288-8988

Casper, WY 82601 3273 N. I-25 Frontage Road 307/237-4259

Denver, CO 80207 5805 East 39th Ave. 303/399-1580

East Hanover, NJ 07936 98 Route #10 201/887-1212

Elkridge, MD 21227 5681 Main Street 410/796-3200

Gray, TN 37615 Suncrest Drive 615/477-3114

Houston, TX 77001 2210 McAllister 713/681-9221

Knoxville, TN 37922 (C&M) 112 Glenleigh Court Suite #1 615/966-8800

Knoxville, TN 37912 (IRES) 4726 Clinton Hwy. 615/525-0404

Milwaukee, WI 53225 12311 West Silver Springs Dr. 414/461-7810

Nashville, TN 37229 310 S. Second St. 615/254-1811

New Castle, DE 19702 91 Christiana Road 302/324-9040

New Cumberland, PA 17070 Exit 15 on Rt. 83 4 miles south of Harrisburg 717/938-1441

New England 300 Tumpike Rd. --Route 9 Southboro, MA 01772 508/481-1350

Philadelphia Boute 300 Montgomeryville, PA 18936

215/855-9990 Phoenix, AZ 85007 820 N. 17th Ave. 602/258-6493

Pico Rivera, CA 90660 5211 Paramount Bivd. 310/948-3801

Portland, OR 97214 240 South East Clay Street 503/232-0151

Sacrameto, CA 95836 1851 Bell Avenue 916/641-1994

San Leandro, CA 94577 1944 Marina Blvd. 510/357-9131

Scranton, PA 18505 605 Davis St. 717/346-3885

Seattle, WA 98168 11222 E. Marginal Way, S. 206/762-7400

U.S. C&M FACTORIES **ROCK DRILLS**

Rotary blasthole deephole.

monitoring rigs
Ingersoll-Rand Co.
Rotary Drill Division 2100 N. First St. Garland, TX 75040 214/495-8181

Downhole Drills and Bits; Pneumatic and Hydraulic Crawler Drills; Anchor Drills; Breakers and JackhamersTM. Ingersoll–Rand Co.

Rock Drill Division 7500 Sharlwell Drive Roanoke, VA 24019-5198 703/362-3321

COMPACTORS, PAVING MILLERS, ASPHALT PAVERS AND FORKLIFTS

Ingersoli-Rand Co. Road Machinery Division Ingersoll Drive Shippensburg, PA 17257 717/532-9181

UNDERGROUND EQUIPMENT

Roadheaders; drill jumbos, dieselpowered production and utility equipment (scoops, haul dumps, ets.)

Contact Rock Drill Division Roanoke, VA

Spilt Set rock stabilizers

Simmons . Rand Co. Split Set Division 100 Thanet Circle Princeton, NJ 08540-3662 609/921-8688

AIR COMPRESSORS

Portable compressors, Generator

Sets and Light Plants
Ingersoll-Rand Co.
Portable Compressor Division P.O. Box 868 501 Sanford Ave. Mocksville, NC 27028 704/634-3561

Small Compressor Plant Ingersoll-Rand Co. 101 Industrial Drive Campbellsville, KY 42718 502/465-3511 Centrifugal compressors (Centac) Ingersoll-Rand Co.

Centrifugal Compressor Division Route 45 Mayfield, KY 42066 502/247-8640

Reciprocating and rotary-screw compressors

Ingersoli-Rand Co. Air Compressor Group P.O. Box 1600 800A Beaty St. Davidson, NC 28036 704/892-7100

PUMPS

Engineered centrifugal pumps Ingersoll-Rand Co. P.O. Box 486

Phillipsburg, NJ 08865 201/859-7000

Reciprocating pumps and standard centrifugal pumps Ingersoli–Rand Co.

P.O. Box 656 Allentown, PA 18105 215/433-6411

Vertical turbine pumps Ingersoll-Rand Co. Vertical Turbine Pump Division Hastings, NE 68901 402/463-1306

TOOLS, WINCHES

Ingersoll-Rand Co. Power Tool Division P.O. Box 1776 Liberty Corner, NJ 07938 201/647-6000

LIQUID/SOLID SEPARATORS

Ingersoll-Rand Co. Impco Division 150 Burke St. Nashua, NH 03061 603/882-2711

CANADA

Surface and underground equipment Tools and Industrial equipment

Ingersoll-Rand Canada Inc. 2360 Millrace Court Mississauga, Ontario L5N1W2 (1)416/858-8480

Ingersoil-Rand Canada, Inc. 2250 Hymus Blvd Dorval, Quebec H9P1J9 (1) 514/683-9157

MEXICO

All equipment

Ingersoll-Rand, S.A. de C.V. Boulevard Centro Fracc, Industrial Puente de Vioas Tlainepantia, 54090 Edo, de Mexico Mexico 52 (5) 390-40-21 52 (5) 390-24-11

SOUTH AMERICA

USA, Miami, Florida 1 (305) 599-0500

Chile - Santiago 56 (2) 41-198

Colombia - Bogota 57 (1) 219-1406/1460

Venezuela - Caracas 58 (2) 239-9369

EUROPE

Austria - Vienna 43 (222) 83-05-250

Belgium - Brussels 32 (02) 216-99-95

France - Trappes 33 (3) 050-61-10

Germany - Ratingen 49 (2102) 48090

*Italy - Milano 39 (02) 950561

Netherlands - Zoeterwoude 31 (071) 452200

Norway - Oslo 47 (02) 39-15-26

Spain - Madrid 34 (9) 1-671-07-00

Sweden - Spanga 46 (08) 750-59-20

Yugoslavia.

United Kingdom - London 44 (01) 584-5070 *Also for Bulgaria, Czechoslovakia, Hungary, Poland, Rumania, USSR,

AFRICA-MIDDLE EAST

Egypt - Cairo (02)341-5190

South Africa - Alrode 27 (011) 864-3930

ASIA-PACIFIC

Australia-Melbourne 61-(3) 794-1611

Hong Kong 852 (5) 270183

India-Bombay 91 (22) 4936765

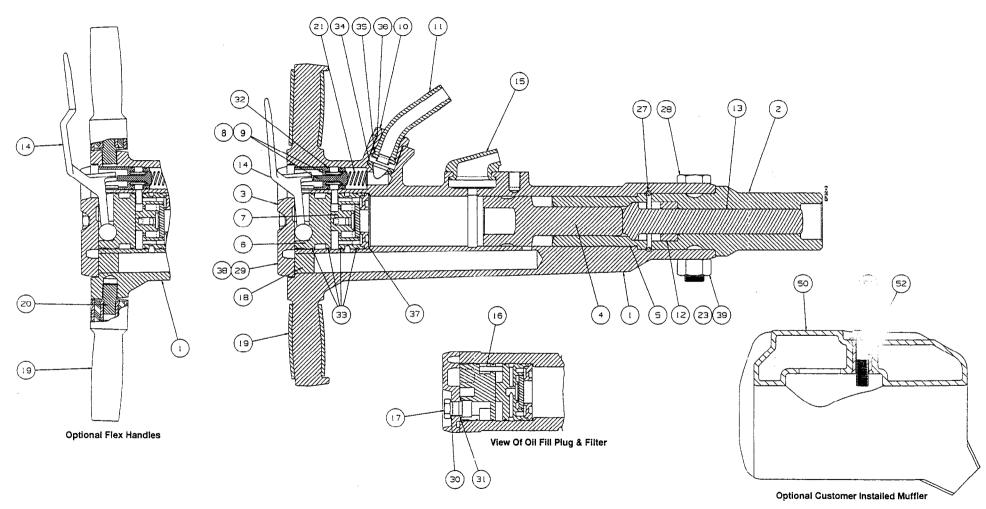
Japan - Tokyo 81 (3) 403-0841/7

Korea - Seoul 82 (2) 776-2541

New Zealand - Auckland 64 (9) 885096

Philippines - Manila 63 (2) 89-85-06/08

Singapore (65) 8611555



Spike Driver Models MX60–SD & MX90–SD – Sectional Illustration (For Parts List, refer to Pages 2 & 3)