

TECHNICAL MANUAL

**UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT
MAINTENANCE REPAIR PARTS AND
SPECIAL TOOLS LISTS**

**DRILL, PNEUMATIC, DRIFTER:
BOOM-TYPE, CRAWLER-MOUNTED,
SELF-PROPELLED
(NSN 3820-00-854-4149)**

INGERSOLL-RAND MODEL CM150A/D475A

This manual supersedes TM 5-3820-239-24P, dated 25 September 1989, and all changes.

Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS

DRILL, PNEUMATIC, DRIFTER: BOOM-TYPE, CRAWLER-MOUNTED, SELF-PROPELLED (NSN 3820-00-854-4149)

INGERSOLL-RAND MODEL CM150A/D475A

Current as of 14 April 1992

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (*Recommended Changes to Publications and Blank forms*), or DA Form 2028-2, located in the back of this manual, direct to: Commander, U.S. Army Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000. A reply will be furnished to you.

Approved for public release; distribution is unlimited.

TABLE OF CONTENTS

		Page	Illus Fig
SECTION I.	INTRODUCTION	1	
SECTION II.	REPAIR PARTS LIST	1-1	
GROUP 13	WHEELS AND TRACK		
	1302 - TRACK SUPPORT ROLLERS AND BRACKETS	1-1	
	FINAL DRIVE AND TRACK ASSEMBLY	1-1	1
	FINAL DRIVE	2-1	2
	TRACK MOUNTING	3-1	3
	TRACK FRAME AND ROLLER	4-1	4
	1303 - TRACK IDLERS AND BRACKETS	5-1	
	TRACK IDLER	5-1	5
	1304 - TRACK DRIVE SPROCKETS	6-1	
	TRACK DRIVE SPROCKET	E-1	6
	1305 - TRACK ASSEMBLY	7-1	
	TRACK ASSEMBLY	7-1	7

* This manual supersedes TM 5-3820-239-24P, dated 25 September 1989, and all changes.

TABLE OF CONTENTS (Con't)

	Page	Illus Fig
GROUP 15	FRAME, TOWING ATTACHMENTS, DRAWBARS AND ARTICULATION SYSTEMS	
1501 - FRAME ASSEMBLY	8-1	
MAIN FRAME AND YOKE ASSEMBLY	8-1	8
STRUTS	9-1	9
1503 - PINTLES AND TOWING ATTACHMENTS	10-1	
TOWING HITCH ASSEMBLY	10-1	10
GROUP 18	BODY, CAB AND HOOD	
1808 - STOWAGE RACKS, BOXES AND STRAPS	11-1	
TOOLBOXES	11-1	11
GROUP 22	BODY, CHASSIS AND HULL ACCESSORY ITEMS	
2210 - DATA PLATES AND INSTRUCTION HOLDERS	12-1	
DATA PLATES	12-1	12
DATA PLATES	13-1	13
DATA PLATES	14-1	14
GROUP 24	HYDRAULIC AND FLUID SYSTEMS	
2401 - PUMP AND MOTOR	15-1	
HYDRAULIC PUMP AND MOTOR	15-1	15
HYDRAULIC MOTOR EXPLODED VIEW	16-1	16
HYDRAULIC PUMP AND COUPLING	17-1	17
HYDRAULIC PUMP EXPLODED VIEW	18-1	18
2403 - HYDRAULIC CONTROLS	19-1	
HYDRAULIC CONTROL VALVE AND THROTTLE VALVE	19-1	19
BOOM CYLINDER CONTROL VALVE EXPLODED VIEW	20-1	20
HYDRAULIC CONTROL VALVE EXPLODED VIEW	21-1	21
REMOTE CONTROL MANIFOLD HOSES AND FITTINGS	22-1	22
REMOTE CONTROL MANIFOLD BODY	23-1	23
REMOTE CONTROL MANIFOLD FEED SPOOLS	24-1	24
REMOTE CONTROL MANIFOLD SPOOL ASSEMBLY	25-1	25
2406 - STRAINERS, FILTERS, LINES AND FITTINGS	26-1	
HYDRAULIC SUCTION FILTER	26-1	26
HYDRAULIC HOSES	27-1	27
HYDRAULIC CYLINDER HOSES	28-1	28
HYDRAULIC OIL FILTER	29-1	29
DRILL AND AIR MOTOR HOSES AND FITTINGS	30-1	30
2407 - HYDRAULIC CYLINDERS	31-1	
HYDRAULIC BOOM ASSEMBLY	31-1	31
HYDRAULIC BOOM LIFT CYLINDER	32-1	32
HYDRAULIC BOOM LIFT CYLINDER EXPLODED VIEW	33-1	33
BOOM SWING CYLINDER, CLEVIS AND PEDESTAL	34-1	34
BOOM SWING CYLINDER ASSEMBLY EXPLODED VIEW	35-1	35
POWER EXTENSION CYLINDER MOUNTING	36-1	36
POWER GUIDE EXTENSION CYLINDER, HOSE AND FITTINGS	37-1	37
POWER GUIDE EXTENSION CYLINDER ASSEMBLY EXPLODED VIEW..... .	38-1	38
POWER DUMP AND SWING	39-1	39
POWER SWING CYLINDER AND SWIVEL	40-1	40

TABLE OF CONTENTS (Cont)

	Page	Illus Fig
2407 - HYDRAULIC CYLINDERS (CON'T)		
POWER SWING CYLINDER ASSEMBLY EXPLODED VIEW	41-1	41
POWER DUMP AND DUMP CYLINDER	42-1	42
POWER DUMP CYLINDER EXPLODED VIEW	43-1	43
 GROUP 50 PNEUMATIC EQUIPMENT		
5006 - LUBRICATION SYSTEM	44-1	
LUBRICATOR MANIFOLD'S LINES AND FITTINGS	44-1	44
LUBRICATOR MANIFOLD EXPLODED VIEW	45-1	45
AIR LINES AND FITTINGS	46-1	46
5008 - AIR INTAKES	47-1	
MAIN AIR INLET VALVE	47-1	47
5015 - AIR DISCHARGE SYSTEM	48-1	
AIRLINES, FITTINGS, AND RELATED PARTS (RETROFIT KIT)	48-1	48
HAMMER VALVE (RETROFIT KIT)	49-1	49
ROTATE, FEED, AND AIR VALVES (RETROFIT KIT)	50-1	50
5019 - PNEUMATIC MOTOR ASSEMBLY	51-1	
TRACTION DRIVE PNEUMATIC MOTOR	51-1	51
PNEUMATIC MOTOR DRIVE GEAR HOUSING	52-1	52
AIR BRAKE CYLINDER AND BAND	53-1	53
AIR BRAKE ACTUATING CYLINDER EXPLODED VIEW	54-1	54
PNEUMATIC MOTOR	55-1	55
PNEUMATIC MOTOR CASE AND CRANK	56-1	56
AIR FEED MOTOR ASSEMBLY	57-1	57
AIR FEED MOTOR WORM GEAR	58-1	58
AIR FEED MOTOR	59-1	59
AIR FEED MOTOR CRANK ASSEMBLY	60-1	60
DRILL DRIFTER ASSEMBLY	61-1	61
DRILL DRIFTER ASSEMBLY, VALVE CHEST AND CHUCK ASSEMBLY ..	62-1	62
DRIFTER ASSEMBLY (RETROFIT KIT)	63-1	63
5020 - GOVERNOR..	64-1	
GOVERNOR CONTROL VALVE SUPPORT	64-1	64
GOVERNOR CONTROL VALVE	65-1	65
 GROUP 74 CRANES, SHOVELS, AND EARTHMOVING EQUIPMENT COMPONENTS		
7473 - LIFT AND SWING MECHANISM	66-1	
BOOM BASE ASSEMBLY	66-1	66
7476 - FEED AND LEVELING	67-1	
DRILL GUIDE	67-1	67
FEEDSHELL, CHAIN, MOUNTING BRACKETS, AND RELATED PARTS (RETROFIT KIT)	66-1	68
DRILL MOUNTING PLATE ASSEMBLY	69-1	69
SLABBACK AND RELATED PARTS (RETROFIT KIT)	70-1	70
CENTRALIZER	71-1	71
CENTRALIZER AND RELATED PARTS (RETROFIT KIT)	72-1	72
FEED MOTOR/GEARBOX AND RELATED PARTS (RETROFIT KIT)	73-1	73
AIR MOTOR COMPONENTS (RETROFIT KIT)	74-1	74
 GROUP 94 REPAIR KITS		
9401 - REPAIR KITS	KIT-1	
REPAIR KITS	KIT-1	KIT

TABLE OF CONTENTS (Con't)

		Page	Illus Fig
GROUP 95	GENERAL USE STANDARDIZED PARTS		
	9501 - BULK MATERIEL	BULK - 1	
	BULK MATERIEL	BULK - 1	BULK
SECTION III.	SPECIAL TOOLS (NOT APPLICABLE)		
SECTION IV.	CROSS-REFERENCE INDEXES		
	NATIONAL STOCK NUMBER INDEX	I-1	
	PART NUMBER INDEX	I-6	
	FIGURE AND ITEM NUMBER INDEX	I-35	

UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS

SECTION I. INTRODUCTION

1. Scope.

This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of Unit, Direct Support, and General Support Maintenance of the Drill, Pneumatic, Drifter. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.

2. General.

In addition to Section I. Introduction, this Repair Parts and Special Tools List is divided into the following sections:

a. *Section II. Repair Parts List.* A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Bulk materials are listed in item name sequence. Repair kits are listed separately in their own functional group within Section II. Repair parts for reparable special tools are also listed in the section. Items listed are shown on the associated illustration(s)/figure(s).

b. *Section III. Special Tools List.* A list of special tools, special TMDE, and other special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance.

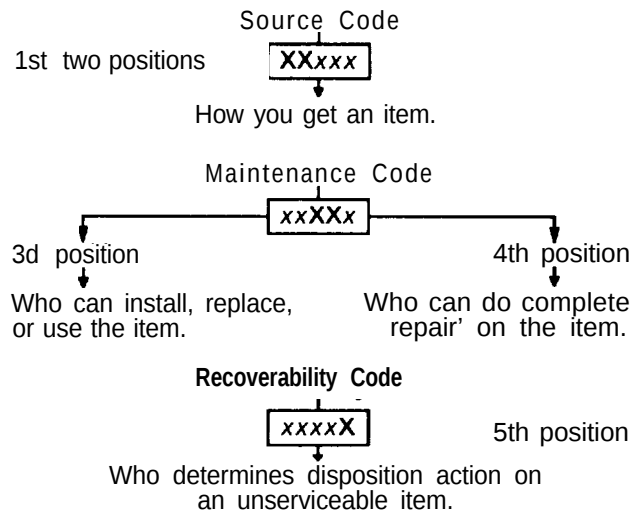
c. *Section IV. Cross-reference Indexes.* A list, in National Item Identification Number (NIIN) sequence, of all National stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration/figure and item number appearance.

The figure and item number index lists figure and item numbers in alphanumeric sequence and cross-references NSN, CAGE, and part numbers.

3. Explanation of Columns (Sections II and III).

a. *ITEM NO. (Column (1)).* Indicates the number used to identify items called out in the illustration.

b. *SMR CODE (Column (2)).* The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instructions, as shown in the following breakout:



**Complete Repair:* Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

(1) *Source Code.* The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follows: