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Security Information

DEPARTMENT OF THE ARMY
SUPPLY CATALOG

ORD 9 SNL G-205

GROUP G

LIST OF ALL SERVICE PARTS

OF

TANK, MEDIUM M4A3, 76-MM GUN

Supersedes that portion of ORD 9 SNL G-104, Vol 15 (Includes SNL G-204 and G-205) 1 November 1945, including
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The Adjutant General

J. LAWTON COLLINS

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MAJOR ITEM

The Tank, medium, M4A3, 76-mm gun is stored issued and reviewed under ORD 8 SNL G-1. This item is nonexpendable.

RESTRICTED**Security Information****INTRODUCTION**

1. GENERAL. *a.* This catalog is a list of items of the 76-mm gun medium tank M4A3 arranged according to standard government grouping.

Note. Many of the parts listed herein are not stocked for issue. See ORD 7 and ORD 8 sections of this catalog for listings of those parts stocked and authorized for issue to the various levels of maintenance. When parts not listed in the ORD 8 are needed, separate requisition for these parts should be forwarded through normal supply channels with justification therefor.

b. For prices of items contained herein, see the appropriate catalog of ORD 5-3 series.

c. This list of all service parts is to be used for identification and storage purposes. Every individual part is not necessarily stored by itself; many parts are stored as authorized assemblies. Such assemblies are indicated herein. The components of such assemblies are listed alphabetically within the group, with the total quantity of each part required for that particular application.

d. Explanation of reference symbols used throughout this catalog are included under heading NOTES.

e. Additional application of items listed in this catalog, if any, are contained in Department of the Army Supply Catalog ORD 5-5 series.

f. Classification codes for Federal stock numbers listed herein are published in ORD 5-2.

g. For full information relative to the Ordnance section of the Department of the Army Supply Catalog, including the purposes and uses, the procedure followed, and the principles employed in its compilation, see ORD 1.

2. MAJOR ITEM DESIGNATION. The major item covered in this catalog is designated as combat vehicle as defined in AR 700-105.

3. PUBLICATIONS PERTAINING TO THIS VEHICLE. The following technical manuals pertain to this vehicle and components thereof: TM 9-759, TM 9-1731B, TM 9-1731G, TM 9-1731K, TM 9-1750A, TM 9-1750B, TM 9-1750K, TM 9-1825A, TM 9-1825B, TM 9-1826B, TM 9-1828A and TM 9-1829A.

4. INTERCHANGEABILITY OF COMPONENTS. *a.* The major components of this vehicle are interchangeable with those same components as used in other vehicles based on the M4 series medium tank chassis.

b. Several parts and accessories of the Ford GAA engine are interchangeable with corresponding parts of the Ford GAF and GAN engines.

c. Several parts of the turret traversing mechanism are interchangeable with the corresponding parts of the M4 series of medium tanks.

5. SMALL NUMBER LOCATIONS. Serial numbers for this vehicle are located as follows:

Complete vehicle.....	Stamped on name plate located on the lower left hull sponson plate just below the instrument panel.
Auxiliary Generator.....	Stamped on name plate located on flywheel housing.
Battery.....	Stamped on battery top cell connector.
Compass.....	Stamped on right side of support bracket.
Engine.....	Stamped on name plate located on cylinder block, magneto end of engine.
Engine Air Cleaner.....	Stamped on name plate located on the air cleaner body.

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Engine Carburetor.....	Stamped on name plate located on top of the carburetor bowl.
Engine Oil Filter.....	Stamped on name plate located on oil filter housing.
Fire Extinguisher Control.....	Stamped on name plate located on face of housing.
Generator.....	Stamped on name plate located on generator housing.
Generator Regulator.....	Stamped on name plate located on the regulator cover.
Mangeto (Engine).....	Stamped on name plate located on top of magneto housing.
Power Train	Stamped on housing located to the left of assistant driver near the center and top slope of the power train.
Starter (Engine)	Stamped on name plate located on starter housing.
Suspension.....	Stamped on top of main casting.
Turret Traversing Electric Motor.....	Stamped on name plate located on motor housing.
Turret Traversing Hydraulic Motor.....	Stamped on name plate located on top of housing.
Turret Traversing Hydraulic Oil Pump.....	Stamped on name plate located on the end of housing.
Turret Traversing Mechanism (Hand).....	Stamped on name plate located on outside of top of gear housing.

6. ILLUSTRATIONS. This catalog contains various illustrations to aid the user in locating and identifying parts. These are placed before each group to be convenient for reference in connection with the text for that group. For each part identified on an illustration, the noun, part number, and group number of the item are given. The prefix portion of the figure number indicates the group to which it pertains; the suffix indicates the sequence number within that group (i. e., figure 01-29 signifies illustration number 29 in group 01).

7. DEFINITION OF LOCATIONAL TERMS. *a.* All like parts on the vehicle which are not interchangeable are designated "*Left and Right*" with respect to their position in the vehicle when viewed from the rear forward. The engine end of the vehicle is considered the rear end.

b. The engine is mounted with the flywheel and clutch end toward the front of the vehicle. Like engine parts, such as cylinder heads, are designated "*Left and Right*" with respect to the position of the engine in the vehicle. When the engine is removed for servicing this fact must be remembered as it is exactly the reverse to the normal "*Left and Right*" designation of engine parts in other vehicles.

8. NOMENCLATURE. *a.* Items appearing within a subgroup that lists components of and/or items related to only *one* assembly or subassembly automatically assume as part of their official nomenclature the title of the pertinent subgroup. (Example: "SEAL, housing" is an entry in subgroup 0504. The complete nomenclature of the item is "SEAL, engine water pump housing," "ENGINE WATER PUMP" being the subgroup title.)

b. Items appearing within a subgroup that lists *more than one* assembly or *more than one* group of related items are listed with their complete nomenclature. (Example: "CLAMP, locking, towing cable" is an entry in subgroup 1503.2. The complete nomenclature of the item is as shown, while the title of the subgroup is "TOWING HOOK, LOCK AND LUNETTE.")

9. COMPONENTS OF KITS, SETS, AND ASSEMBLIES. Whenever any doubt might exist as to what items are included as components of assemblies, or sets, an explanatory note or a complete listing of such component parts is given.

10. ATTACHING PARTS. Attaching parts such as bolts, nuts, rivets, washers, etc., are indented immediately under the item which they attach. Attaching parts for any attached item not procured will be found listed under their proper alphabetical listing in the appropriate group; but they will not be indented. Whenever two or more similar items having the same attaching parts such as front and rear oil seal retainers, are listed, they are placed one immediately following the other and the attaching parts for both are covered by a single listing under the second item.

11. ARMAMENT, SIGHTING, AND FIRE-CONTROL EQUIPMENT. The following is a list of armament, sighting, and fire control equipment pertinent to this major item. For parts, see the ORD 9 catalog indicated:

<i>SNL No.</i>	<i>Armament</i>
C-64.....	1 GUN, 76-mm, M1A2
	or
C-64.....	GUN, 76-mm, M1A1C
A-6.....	2 GUN, machine, cal. .30, Browning, M1919A4, flexible
A-39.....	1 GUN, machine, cal. .50, Browning, M2, HB, flexible
C-64.....	1 MOUNT, combination gun, M62
A-55, Sec. 38.....	1 MOUNT, machine gun, AA, cal. .50 (6580030)
A-55, Sec. 42.....	1 MOUNT, machine gun, cal. .30 (D82255B)
A-6.....	1 MOUNT, tripod, machine gun, cal. .30, M2
<i>Sighting and Fire Control</i>	
F-205.....	1 LIGHT, aiming post, M14, green filter
F-205.....	1 LIGHT, aiming post, M14, red filter
F-294.....	1 MOUNT, telescope, M57, w/e
F-312.....	1 MOUNT, periscope, T116, w/e
	and
F-235.....	1 PERISCOPE, M106, w/e
	and
F-235, Vol. 3.....	1 PERISCOPE, M8A1, w/TELESCOPE, M39A2, w/e
	or
F-235, Vol. 1.....	2 PERISCOPE, M4A1, w/TELESCOPE, M47A2, w/e
F-235, Vol. 5.....	12 PERISCOPE, M13 (6 are spare)
	or
F-235, Vol. 5.....	PERISCOPE, M13B1 (6 or spare)
	or
F-235, Vol. 2.....	PERISCOPE, M6, w/spare head (6 are spare)
F-35.....	1 POST, aiming, M1, set
F-281.....	1 QUADRANT, elevation, M9, w/e
F-140.....	1 QUADRANT, gunner's, M1, w/e
F-357.....	1 SETTER, fuze, M27 (wrench)
	or
F-1.....	SETTER, fuze, M14 (wrench)
F-235.....	1 TELESCOPE, M83D
	or
F-235, Vol. 10.....	TELESCOPE, M71D

12. HOW TO FIND PARTS. This catalog is arranged and cross-indexed so that parts can be found easily even though only one of the several identifying factors is known. The various ways in which parts can be located are as follows:

a. If only the nomenclature (basic noun-name) is known, and the subgroup is not, refer to the alphabetical index in the back of the catalog. This index will give the subgroup in which the part is listed. As the part names are arranged in alphabetical order within this subgroup, the complete listing of the part can readily be found.

b. If any one of the numbers—ordnance number, stock number, or manufacturer's number—is known, refer to the appropriate numerical index in the back of the catalog. This index will give the subgroup number in which the part will be found.

c. If the shape, use, function, or location of the part is known, refer to illustrations in which the part is likely to appear until a picture of the part is found. The arrow pointing to the part will lead out to a listing of the name, part number, and subgroup number, which will permit locating the complete listing of the part.

13. STANDARD GOVERNMENT GROUPING. The parts listed in this catalog are arranged by groups and subgroups and alphabetically within these groups. Parts are grouped primarily on

the basis of their function rather than location. This arrangement facilitates identification and selection of parts. Refer to paragraph 12, "HOW TO FIND PARTS."

01 — ENGINE

- 0100 Engine Assembly
- 0101 Cylinder Block, Head, and Sleeve
- 0102 Crankshaft and Bearings
- 0103 Flywheel and Ring Gear
- 0104 Pistons, Rings, Connecting Rods, and Bearings
- 0105.1 Valves, Springs, and Inserts
- 0105.2 Valve Tappets
- 0105.3 Camshaft, Bearings, and Tachometer Drive
- 0105.4 Camshaft Drive (Upper)
- 0106.1 Oil Pumps and Strainers
- 0106.2 Oil Filter
- 0106.3 Oil Cooler
- 0106.4 Oil Pressure Relief and By-Pass Valves
- 0106.5 Crankcase Breather and Filler
- 0106.6 Oil Pan, Oil Lines, Level Gages, and Sending Units
- 0108 Intake and Exhaust Manifolds
- 0109 Accessory Drive

02 — CLUTCH

- 0200 Clutch Assembly, Housing, and Covers
- 0201 Clutch Main Shaft, Plates, Disk, Pilot Bearings, and Springs
- 0202 Clutch Release Fork, Shaft, and Bearings

03 — FUEL SYSTEM

- 0301.1 Carburetor
- 0301.2 Carburetor Adapter and Tubes
- 0302 Fuel Pump
- 0304.1 Air Cleaner (Donaldson Model DN A1122) (Optional w/Vortox Model VR-4190)
- 0304.2 Air Cleaner (Vortox Model VR-4190) (Optional w/Donaldson Model DN-1122)
- 0304.3 Air Cleaner Mounting Bracket, Cradle, Air Ducts, and Control Rods
- 0306.1 Fuel Tanks and Fuel Level Gages
- 0306.2 Fuel Lines and Fittings
- 0306.3 Fuel Tank Filler Neck and Filler Cap
- 0306.4 Fuel Shut-off, Valves and Controls
- 0308 Governor and Controls
- 0309 Fuel Filters
- 0311 Fuel Priming System and Lines

04 — EXHAUST SYSTEM

- 0401 Exhaust Collector, Deflectors, Elbows, Muffler, and Pipes

05 — COOLING SYSTEM

- 0501 Radiator, Radiator support, and Tanks
- 0502 Radiator Shrouds and Baffles
- 0503 Radiator Clamps, Connectors, Fittings, Hose, Manifolds, Thermostat Lines, and Sending Units
- 0504 Engine Water Pump
- 0505.1 Radiator Fan Drive and Oil Level Gage

- 0505.2 Radiator Fan Drive Propeller Shaft (Spicer)
- 0505.25 Radiator Fan Drive Propeller Shaft (Universal Products)
- 0505.3 Radiator Fan Drive and Fan Drive Pulleys

06 — ELECTRICAL SYSTEM

- 0601.11 Generator (Auto-Lite AL-GFR4804) (Optional with Delco Remy Generator DR-1117309)
- 0601.15 Generator (Delco Remy DR-1117309) (Optional with Auto-Lite Generator AL-GFR4804)
- 0601.2 Generator Mounting Bracket, Cradle, and Related Parts
- 0602 Generator Regulator
- 0603.1 Starter
- 0603.2 Starter Relay Switch
- 0604.11 Magneto
- 0604.15 Magneto Governor
- 0605 Spark Plugs and Ignition Wiring
- 0607 Instrument Panel
- 0608.1 Switch Boxes, Terminal Boxes, Circuit Breakers, Resistors and Switches
- 0608.2 Turret Control and Switch Boxes
- 0609.1 Head, Marker, and Tail Lights
- 0609.2 Dome Lights
- 0609.3 Turret Spot Light and Switches
- 0611 Horn and Switch
- 0612 Battery, Battery Box, Cables, Damper, and Controls
- 0613.1 Hull Wiring.
- 0613.2 Turret Wiring
- 0614 Turret Slip Ring Box and Parts
- 0616 Hull and Turret Ventilating Blowers

07 — TRANSMISSION ASSEMBLY

- 0700 Transmission Assembly
- 0701 Transmission Case, Covers, Gaskets, Caps, and Plugs
- 0702.1 Transmission Input Shaft, Bearings, Cones, Flange, Gears, Spacers, and Synchronizer
- 0702.3 Transmission Output Shaft, Bearings, Collars, Cones, Gears, Spacers, and Synchronizer
- 0702.5 Transmission Countershaft, Idler Shaft, Gears, and Bearings
- 0704 Transmission Gear Shifting Forks, Brackets, Seals, Shafts, and Sleeves
- 0706.1 Transmission Oil Pump and Relief Valve
- 0706.5 Transmission Oil Cooler and Cooler Guard
- 0706.7 Transmission Breather
- 0706.9 Transmission Oil Lines, Connections, Level Gage, and Sending Unit

09 — PROPELLER SHAFT

0900 Propeller Shaft, Universal Joints, and Yokes

10 — DIFFERENTIAL AND FINAL DRIVE

1000 Differential and Final Drive Assembly
 1001 Differential Covers, Gaskets, Housing, Plugs, and Seals
 1002 Differential Bearings, Carrier, Case, Gears, Pinions, Shafts, and Balancing Unit
 1004 Differential Steering Brakes
 1005.5 Differential Housing Breather
 1005.6 Differential Oil Sump, Lines, Fittings, and Screens
 1008.1 Final Drive Assembly
 1008.2 Final Drive Bearings, Covers, Gears, Pinions, and Shafts

13 — TRACKS AND SUSPENSION

1301.1 Volute Suspension Assembly and Parts (Horizontal Type)
 1301.5 Volute Suspension Assembly and Parts (Vertical Type)
 1302.1 Track Support Roller (Horizontal Suspension, Single Track Type (10 in))
 1302.2 Track Support Roller (Horizontal Suspension, Dual Track Type (13½ in))
 1302.5 Track Support Rollers and Parts (Vertical Type)
 1303.1 Track Rear Idlers (Horizontal Suspension, Dual Track Type)
 1303.5 Track Idlers and Parts (Vertical and Horizontal Suspension, Single Track Type)
 1304.1 Track Drive Sprockets (Horizontal, Wide Track Type)
 1304.5 Track Drive Sprockets (Vertical Type, Narrow Track)
 1305.1 Track Assembly, T66 (Horizontal Suspension, Wide, Steel) (Optional w/Track T80 and T84)
 1305.2 Track Assembly, T80 (Horizontal Suspension, Wide, Rubber Back Steel Chevron) (Optional w/Track T66 and T84)
 1305.3 Track Assembly, T84 (Horizontal Suspension, Wide, Rubber) (Optional w/Track T66 and T80)
 1305.51 Track Assembly, T41 (Vertical Suspension, Narrow, Rubber, Reversible)
 1305.54 Track Assembly, T47E1 (Vertical Suspension, Narrow, Steel w/Rubber Top)
 1305.61 Track Assembly, T48 (Vertical Suspension, Narrow, Rubber Chevron) (Optional w/Track T51, T54E1 and T74)
 1305.65 Track Assembly, T49 (Vertical Suspension, Narrow, Steel Chevron)
 1305.71 Track Assembly, T51 (Vertical Suspension, Narrow, Rubber, Non-Reversible) (Optional w/Track T48, T54E1 and T74)

1305.72 Track Assembly, T54E1 (Vertical Suspension, Narrow, Steel Chevron) (Optional w/Track T48, T51 and T74)
 1305.75 Track Assembly, T56 (Vertical Suspension, Narrow, Steel Chevron)
 1305.78 Track Assembly, T56E1 (Vertical Suspension, Narrow, Steel)
 1305.81 Track Assembly, T62 (Vertical Suspension, Narrow, Steel)
 1305.84 Track Assembly, T74 (Vertical Suspension, Narrow, Rubber Back, Steel Chevron) (Optional w/Track T48, T51 and T54E1)
 1305.9 Track Assembly, Cuff Type (Vertical Suspension, Narrow, Steel)

14 — CONTROLS

1401.1 Steering Brake Controls
 1401.2 Parking Brake Mechanism
 1402.1 Accelerator and Throttle Controls
 1402.2 Engine Carburetor, Accelerator, and Throttle Controls (Linkage)
 1403 Clutch Controls
 1404 Transmission Controls

15 — TOWING ATTACHMENTS

1503.1 Towing Pintles
 1503.2 Towing Hook, Lock, and Lunette

16 — SHOCK ABSORBERS

1604 Shock Absorbers (Horizontal Suspension)

17 — FENDERS AND SAND SHIELDS

1701.1 Fenders, Sand Shields, Plates, and Supports (Narrow Track, Vertical Suspension)
 1701.2 Fenders, Sand Shields, Plates, and Supports (Wide Track, Horizontal Suspension)

18 — HULL

1800 Hull Assembly
 1801.1 Hull Mounting and Attaching Parts
 1801.2 Rear Stowage Rack (7095952) Assembly (Used only on Vehicles Equipped with Muffler, Assembly 7095930)
 1803.11 Driver's and Assistant Driver's Doors
 1303.12 Engine Compartment Doors, Hatches, and Locks
 1803.15 Hull Covers (Exterior, Miscellaneous)
 1803.2 Periscope Holders, Housings, and Mountings
 1804.1 Hull Bulkheads, Panels, and Related Parts
 1804.2 Hull Ventilators and Controls
 1804.5 Gun Barrel Traveling Lock
 1805.1 Hull Main and Sub-Floors
 1805.2 Escape Door (E4162A) Assembly (Used with Vertical Suspension, Superseded by Door, Assembly 7069430)
 1805.3 Escape Door (7069430) Assembly (Used

	with Horizontal Suspension, Super- sedes Door, Assembly E4162A)
1805.5	Hull Floor Drain Valves and Controls
1806.1	Driver's and Assistant Driver's Seat
1806.2	Crash Pads
1808.11	76-mm Ammunition Stowage Boxes, Con- tainers, and Racks
1808.12	Cal. .30, .45, and .50 Ammunition Stow- age and Containers
1808.2	Miscellaneous Stowage Boxes
1808.3	Miscellaneous Stowage Brackets, Clamps, Clips, Holders, Racks, and Straps

19 — TURRET

1901.11	Turret and Related Parts
1901.15	Turret Basket
1901.2	Turret Race
1901.3	Turret Traversing Locks
1901.41	Commander's and Gun Loader's Seats (Folding Type)
1901.45	Gunner's Seat (D90025) Assembly
1901.5	Crash Pads and Protective Parts
1901.6	Caliber .50 AA Machine Gun Pintle Stand and Traveling Lock
1903.1	Commander's Vision Cupola
1903.2	Doors, Hatches, Pistol Port, Ventilators, and Locks
1903.3	Periscope Holders, Housings and Mount- ing Parts
1905.1	Turret Traversing Mechanism
1905.3	Traversing Hydraulic Motor and Motor Adapter
1905.5	Traversing Hydraulic Pump
1905.61	Traversing Hydraulic Pump Control and Gun Firing Handle
1905.64	Commander's Turret Traversing Dual Control Assembly (C100603) (Super- sedes by Control, Assembly 7068143)
1905.65	Commander's Turret Traversing Dual Control Assembly (7068143) (Super- sedes Control, Assembly C100603)
1905.7	Traversing Oil Reservoir, Fittings, and Tubes
1905.9	Traversing Electric Motor and Mounting Brackets
1906.1	Turret 76-mm Ammunition Stowage Boxes and Racks
1906.2	Turret Miscellaneous Stowage Boxes, Racks, and Straps

21 — GUARDS

2101	Guards (Exterior)
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22 — MISCELLANEOUS ACCESSORIES

2201	Mantlet Cover and Clutch Housing Cover
2202.1	Driver's Hood, Mirror, and Windshield
2202.2	Windshield Wiper Motor
2208.1	Speedometer, Adapter, and Drive
2208.2	Tachometer, Adapter, and Drive
2209.1	Azimuth Indicator Assembly (D78232C4)
2209.2	Azimuth Indicator Assembly (7068178)
2209.3	Hull and Turret Compasses, and Mount- ings
2210	Vehicular Data Plates

24 — FIRE EXTINGUISHER SYSTEM

2401.1	Fixed Fire Extinguisher Lines
2401.2	Portable Fire Extinguisher and Bracket
2401.3	Fixed Fire Extinguisher Remote Con- trol Head and Discharge Valve (C-O-Two)
2401.4	Fixed Fire Extinguisher Remote Con- trol Head and Discharge Valve (Kidde)

29 — AUXILIARY GENERATOR, ENGINE, AND CONTROLS

2900	Generator and Engine Assembly
2911	Crankcase, Cylinder, and Shield
2912	Crankshaft and Bearings
2913	Flywheel and Housing
2914	Piston, Rings, Pin, and Connecting Rod
2915.1	Intake Valve
2917	Manual Starting Device
2931	Carburetor
2933	Carburetor Air Filter, Assembly
2935	Fuel Tank, Level Gage, Shut-Off Valve, Lines, and Fittings
2936	Governor
2937	Fuel Filter
2941	Exhaust Muffler, Pipes, and Connections
2942	Air and Exhaust Ducts and Controls
2961	Generator and Components
2962	Generator Regulator and Mounting Sup- port
2964.11	Magneto Assembly and Parts
2964.15	Timing Bracket and Parts
2965	Ignition Wiring and Spark Plug
2967	Generator Control Box, Ammeter, Cir- cuit Breakers, and Wiring
2968	Starting and Generator Charging Con- trol Switches

14. ABBREVIATIONS. The following abbreviations appear in this catalog:

adj.....Adjust, adjustable, adjusting
al.....aluminum
al-alloy.....aluminum-alloy
al-bz.....aluminum-bronze
alloy-S.....alloy steel
amp.....ampere
anld.....annealed

aprx.....approximate, approximately
asb.....asbestos
assy.....assembly
AWG.....American Wire Gage
bdg-hd.....binding-head
bev.....bevel, beveled
b-hd.....button-head

br	brass	ID.....	inside diameter
brgt	bright	in.....	inch (es)
br-pltd	brass-plated	incand	incandescent
bz	bronze	inter	internal
bz-cast	bronze-casting	int-ext-teeth.....	internal-external teeth
cand	candelabra	int-teeth.....	internal teeth (lock washer)
cand-bay-base.....	candelabra-bayonet base	lb.....	pound (s)
carb	carbon	lea	leather
cd	cadmium	lead-ctd	lead-coated
cd-pltd	cadmium-plated	lg	long
chr-alloy	chrome-alloy	lgh	length
chr-alloy-S	chrome-alloy-steel	LH.....	left hand
chr-mo-S	chrome-molybdenum-steel	lkg	locking
chr-pltd	chrome-plated	lt.....	light (weight)
ck	countersunk	lubr.....	lubricator, lubricating, or lubrication
ck-hd	countersunk-head	mach	machine
cold-fin-S	cold-finish-steel	mang-bz.....	manganese bronze
cone-pt	cone-point	max	maximum
contd	continued	med	medium
cop.....	copper (cuprum)	mfd	microfarad
cop-asb	copper-asbestos	MI.....	malleable iron
corr-res-S.....	corrosion resistant steel	min...miniature, minimum, minute (angular measure)	
cp	candlepower	minute (time interval)	
c-pin.....	cotter pin	misc	miscellaneous
ctd	coated	ML....Metal encased seal with spring loaded leather,	
cup-pt	cup-point	neoprene or composition sealing member.	
dbld	double	mm	millimeter
dbld-dld	double-drilled	N.....	National Thread Form
dbld-ear	double-ear	NC.....	National Course Thread
dbld-tun-fil.....	double-tungsten filament	NEF.....	National Extra Fine Thread
deg.....	degree (angle)	NF.....	National Fine Thread
diam	diameter	ni	nickel
dld	drilled	ni-pltd	nickel-plated
dld f/c-pin.....	drilled for cotter pin	ni-S	nickel-steel
dld f/lkg-wire.....	drilled for locking wire	No	number
dog-pt	dog-point	nom	nominal
ea	each	NPT.....	National Taper Pipe Thread
elec	electric	NS.....	National Form Thread, Special Pitch
exter	external	o.....	degree (temperature)
ext-hv.....	extra heavy	oct	octagon
ext-teeth.....	external teeth (lock washer)	OD.....	outside diameter
fastnr	fastener	oval-hd	oval-head
fbr	fiber	oz.....	ounce (s)
fil	filament	p-bz	phosphor-bronze
fil-hd	fillister-head	phos-ctd	phosphate-coated
fin.....	finish or finishing	phos-pltd.....	phosphate plated
flex	flexible	pivot-pt.....	pivot point
fl-hd	flat-head	pkg	package
fl-pt	flat-point	plain-pt.....	plain point
ga	gage	pltd	plated
gib-hd	gib-head	psi.....	pounds per square inch
glvd	galvanized	pt	point
graphite-bz	graphite-bronze	rd	round
hanger-pt	hanger-point	rd-end	round-end
hd	head	rd-hd	round-head
hdls	headless	rect-hd.....	rectangular head
hex	hexagonal	reg	regular
hex-hd	hexagon-head	retn	retaining
hex-socket	hexagon-socket	RH.....	right hand
hex-socket-hd.....	hexagon socket head	ru	rubber
ht	height	S	steel
hv	heavy	SAE.....	Society of Automotive Engineers

sec	second (angular measure)	std	standard
	second (time interval) section	stght	straight
serrated-shk	serrated-shank	stls-S	stainless-steel
s-fin	semifinished	syn-ru	synthetic rubber
sgle	single	T	teeth
sgle-ear	single ear	tapd	tapered
shk	shank	thd	thread or threaded
s ltd	slotted	thk	thick
s ltd-hd	slotted head	thkns	thickness
s ltd-pt	slotted point	tnd	tinned
socket-hd	socket-head	tnd-cop	tinned-copper
sp	special	tu	tubing
spec	specification	tubr	tubular
spg	spring	tun-fil	tungsten-filament
spg-br	spring-brass	truss-hd	truss-head
spg-S	spring-steel	unfin-S	unfinished steel
spnr	spanner	v	volt
sp-pt	special point	vol	volume
sq	square	w/	with
sq-hd	square-head	WI	wrought-iron
sq-nk	square-neck	w/o	without
sq-shoulder	square-shoulder	zn	zinc
sq-tip	square-tip	zn-pltd	zinc-plated
SR	Special Regulations		

15. LIST OF MANUFACTURERS' SYMBOLS. The following list of symbols preceding the manufacturers' part numbers appearing in this catalog:

<i>Symbol</i>	<i>Manufacturer</i>	<i>Symbol</i>	<i>Manufacturer</i>
AB	Aetna Ball & Roller Bearing Co.	EC	Eclipse-Pioneer Division
AC	A. C. Spark Plug Div.	EN	Elastic Stop Nut Corp. of America
ACR	American Radio Hardware Co., Inc.	FAF	The Fafnir Bearing Co.
AEE	Allen Electric & Equipment Co.	FE	Federal Electric Co.
AIR	Air Force-Navy Aeronautical Standard	FLS	Fulton Sylphon Co.
AL	The Electric Auto-Lite Co.	FM	Ford Motor Co.
ALM	The Allen Mfg. Co.	GE	General Electric Co.
AMP	American Phenolic Corp.	GL	Guide Lamp Div. (General Motors Corp.)
BA	The Bassick Co.	HC	Cole-Hersee Co.
BAR	Barcy-Nicholson Co.	HL	Homelite Corp.
BCA	The Bearings Co. of America	HLH	Holland Hitch Co.
BN	Bantam Bearings Div.	HP	Harris Products Co.
BO	American Bosch Corp.	HR	Harrison Radiator Division
BS	Superseded by Symbol BX	HUL	Hull Mfg. Co.
BX	Bendix Products Division	HY	Hyatt Bearings Division
BZ	Breeze Corporations, Inc.	HYB	Hydraulic Brake Co.
CB	The Electric Auto-Lite Co. (formerly Corcoran Brown Co.)	IB	Imperial Brass Mfg. Co.
CC	Chrysler Corp.	IV	Irvington Varnish & Insulator Co.
CCL	Corbin Cabinet Lock\Div. (The American Hardware Corp.)	KCC	Keystone Carbon Co., Inc.
CH	Cutler-Hammer, Inc.	KS	King-Seeley Corp.
CM	The Chicago Rawhide Mfg. Co.	LAD	R. D. Fageol Co.
COT	C-O-Two Fire Equipment Co.	LI	Lisle Corp.
CP	Champion Spark Plug Co.	LM	Long Mfg. Division
CU	Cuno Engineering Corp.	MAE	Monroe Auto Equipment Co.
DGM	Detroit Gasket & Mfg. Co.	MCR	Micro Switch Division
DM	Douglas Mfg. Div.	MO	Modine Mfg. Co.
DN	Donaldson Co., Inc.	MRM	Manhattan Rubber Mfg. Division
DR	Delco-Remy Div.	MU	Mueller Brass Co.
DSN	Detroit Stamping Co.	MW	Motor Wheel Corp.
DTC	Tobe Deutschmann Corp.	N&J	North & Judd Mfg. Co.
DV	The Dole Valve Co.	ND	New Departure Division
		NI	Novi Equipment Co.
		NMB	National Motor Bearing Co., Inc.