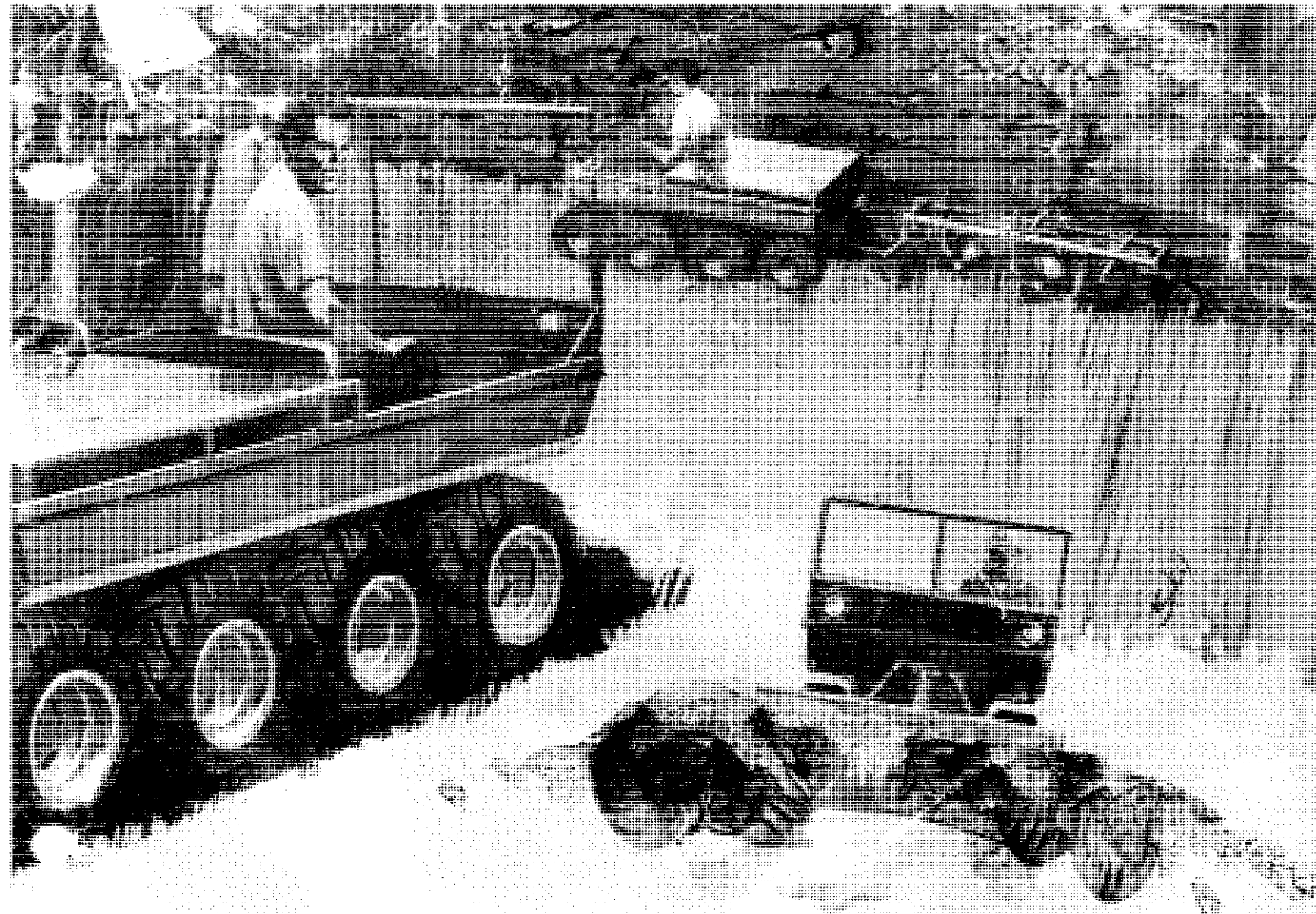




ILLUSTRATED PARTS LIST

MODEL "A"

IDENTIFICATION

KID Serial Number. The KID serial number is stamped on the identification plate located on the engine compartment bulkhead directly behind the driver's seat.

For prompt, efficient service when ordering parts or requesting service at your local KID dealer, we recommend you record the serial number in this manual and also keep with your personal papers for ready reference.

KID Serial Number

JK6A-01671

7/13/71

order only genuine
kid parts

HOW TO ORDER PARTS

When ordering parts, state Part Number, KID Serial Number, Part Name, and Quantity Required --- DO NOT ORDER BY REFERENCE NUMBER.

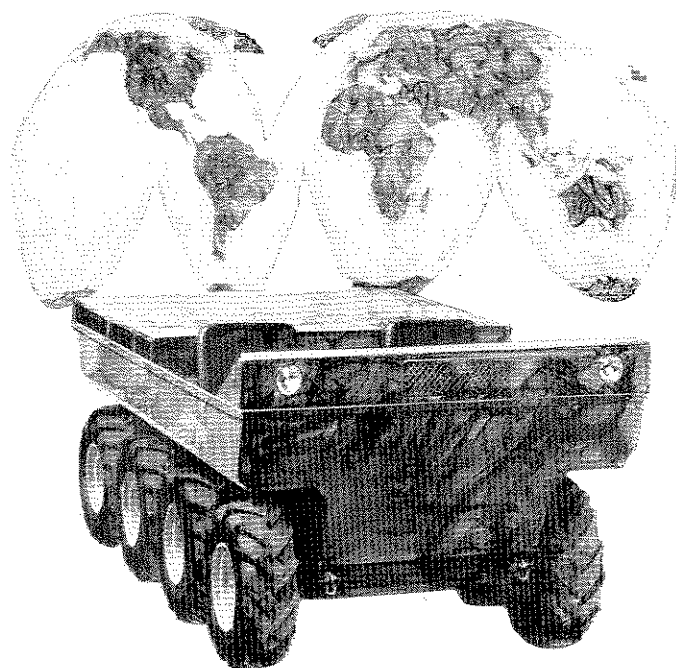
To assure continued successful and trouble-free operation of your KID, order all parts from your authorized KID dealer or distributor.

DO NOT ACCEPT "WILL-FIT" PARTS. THEY MAY SHORTEN THE LIFE OF THE KID.

The information and specifications included in this Illustrated Parts List were in effect at the time of approval for printing. Kinetics International reserves the right, however, to discontinue or change any specifications or design at any time without notice and without incurring any obligation whatsoever.

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ILLUSTRATED PARTS LIST

Introduction

This Illustrated Parts List (IPL) is a complete list of KID parts keyed and referenced to "exploded view" illustrations of the assembly.

Section I covers the KID body, including upper and lower hulls, cargo deck, seats, and related parts. Section II covers the power train, which includes the engine, the gearbox, and the transmissions. Section III covers the running gear, including the chains, sprockets, chain tensioners, axles, bearings, and wheels. Section IV is an illustrated parts breakdown of systems, showing each system as an installation, and also as a group of related parts. The systems covered in this section are: control systems, hydraulic system, fuel system, and electrical system. This section is particularly useful in that it not only lists the desired part numbers, but associates the parts as a system. The Illustrated Parts Breakdown is a very useful aid in the operation and maintenance of the KID. It will not only supply needed part numbers, but will show parts relationships as an invaluable aid in the proper assembly, disassembly, removal and installation of units. Use it to familiarize yourself with the KID as well. Learn how the IPL works, and use it.

The column headings are cross-referenced and keyed to the illustration. The first column is "Reference No.," which is the number called out on the illustration. The second column lists the part number of the illustrated part. The third column gives a brief, identifying description of the

part, and the fourth column tells the quantity of those parts required for that particular assembly.

Use the illustrations to assist you in identifying the part number desired. After visual recognition of the part, note its reference number and refer to that number in the first column of the associated parts list.

Note that where assemblies are available (for replacement rather than repair) the assembly bears its own part number. When ordering replacement assemblies this is the only part number required on your order. Where repair is most feasible, the assembly is broken down into individual component part numbers and illustrated so you may order parts necessary to accomplish repair.

In some cases individual parts are not listed for an assembly, ie Starting Motor and Distributor Subassemblies. In these cases Kinetics International does not recommend repair since it would not be economically feasible.

If you already know the part number you require for repair or replacement turn to the section the part appears in, ie Tractor Body, Power Train, Running Gear or Systems. Each section provides individual treatment of all assemblies and components within that category. Locate the reference number adjacent to the part number and verify, on the illustration, that your desired part is there.

After the part is verified, refer to the Superseded Parts List to confirm that no change has occurred.

CONVERSION TABLE

INCHES (FRACTIONS & DECIMALS) TO MILLIMETERS

INCHES	MM	INCHES	MM
1/64 = .0156	.3969	33/64 = .5156	13.0969
1/32 = .0312	.7937	17/32 = .5312	13.4937
3/64 = .0469	1.1906	35/64 = .5469	13.8906
1/16 = .0625	1.5875	9/16 = .5625	14.2875
5/64 = .0781	1.9844	37/64 = .5781	14.6844
3/32 = .0937	2.3812	19/32 = .5937	15.0812
7/64 = .1094	2.7781	39/64 = .6094	15.4781
1/8 = .125	3.1750	5/8 = .625	15.8750
9/64 = .1406	3.5719	41/64 = .6406	16.2719
5/32 = .1562	3.9687	21/32 = .6562	16.6687
11/64 = .1719	4.3656	43/64 = .6719	17.0656
3/16 = .1875	4.7625	11/16 = .6875	17.4625
13/64 = .2031	5.1594	45/64 = .7031	17.8594
7/32 = .2187	5.5562	23/32 = .7187	18.2562
15/64 = .2344	5.9531	47/64 = .7344	18.6531
1/4 = .25	6.350	3/4 = .75	19.050
17/64 = .2656	6.7469	49/64 = .7656	19.4469
9/32 = .2812	7.1437	25/32 = .7812	19.8437
19/64 = .2969	7.5406	51/64 = .7969	20.2406
5/16 = .3125	7.9375	13/16 = .8125	20.6375
21/64 = .3281	8.3344	53/64 = .8281	21.0344
11/32 = .3437	8.7312	27/32 = .8437	21.4312
23/64 = .3594	9.1281	55/64 = .8594	21.8281
3/8 = .375	9.5250	7/8 = .875	22.2250
25/64 = .3906	9.9219	57/64 = .8906	22.6219
13/32 = .4062	10.3187	29/32 = .9062	23.0187
27/64 = .4219	10.7156	59/64 = .9219	23.4156
7/16 = .4375	11.1125	15/16 = .9375	23.8125
29/64 = .4531	11.5094	61/64 = .9531	24.2094
15/32 = .4687	11.9062	31/32 = .9687	24.6062
31/64 = .4844	12.3031	63/64 = .9844	25.0031
1/2 = .5	12.700	1 = 1.0000	25.40

SUPERSEDED PARTS LIST

Distributors are required to update this parts book prior to delivery to user. Vehicle, Engine and Transmission Serial Numbers must be listed and any and all part number changes noted below. To make certain you have ordered correct parts, refer to this form before submitting Parts Order.

[illegible]

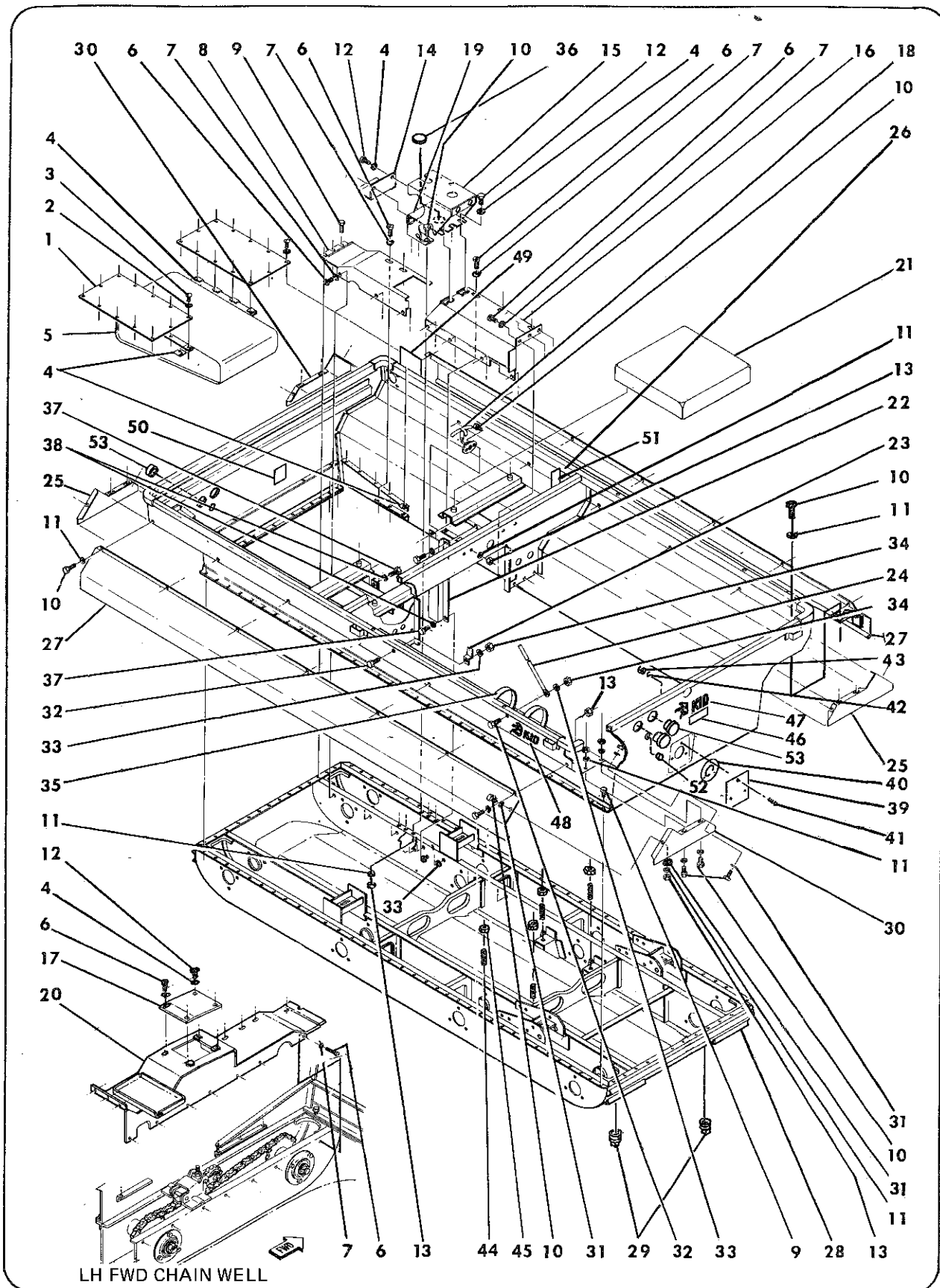


FIGURE I-1 - TRACTOR BODY

SECTION I TRACTOR BODY

The tractor body is in two sections - upper hull and lower hull. The upper and lower hulls are bolted together with a sealant on the mating surfaces to form a watertight hull. This means of assembly provides greater overall strength and terminal rigidity than conventional assemblies.

The hull provides a basic chassis for all other components. The seats are mated to permanently installed bases. The cargo deck covers the back half of the KID, forming a cover for the engine compartment and providing a cargo carrying area.

Heavy gauge sheet metal plates and baffles act as stress members for the hull, yet allow complete drainage from the front to the drain plugs in the rear. Skirts over the wheels or tracks can be installed or removed depending on how the operator intends to use the KID.

REF. NO.	PART NO.	DESCRIPTION	QTY.	REF. NO.	PART NO.	DESCRIPTION	QTY.
1	21348	Toe Board	2	26	21002	Hull Assy. Upper	1
2	21531	Lockwasher	22	27	22264	Fender Skirt Assy.	2
3	21530	Screw	22	28	21010	Hull Assy., Lower	1
4	21580	Fastener	30	29	21349	Drain Plug	2
5	21346	Fuel Tank (Ref. only, See Figure IV-7)		30	22324-2	Swim Vane	2
6	22537	Screw, Self Tapping	37	31	21650	Washer, Plain	20
7	21525	Lockwasher	37	32	21585	Screw	2
8	21287	Chain Guard, Front R.H.	1	33	21599	Washer, Plain	6
9	22536	Lockscrew	120	34	21598	Nut, Self Locking	2
10	21571	Screw	42	35	21013	Cradle Assy.	2
11	21573	Lockwasher	42	36	22351	Plug	1
12	21577	Screw	8	37	21539	Screw	4
13	21572	Nut	36	38	21537	Lockwasher	4
14	22342	Chain Guard Cover, R.H.	1	39	21343	Cover, PTO Outlet	1
15	21029	Panel Assy., Steering Console	1	40	21344	Gasket, Cover, PTO Outlet	1
16	21174	Chain Guard, Rear, R.H.	1	41	21552	Screw	3
17	22347	Cover, Chain Guard, L.H.	1	42	21543	Nut	3
18	22392-1	Hood Catch	1	43	21544	Lockwasher	3
19	21288	Chain Guard, Center Panel, R.H.	1	44	21833	Stud	4
20	21090	Chain Guard Assy., L.H.	1	45	21832	Locknut	4
21	21334	Seat Bottom	2	46	22427	PTO Warning Decal	1
22	21150	Channel, Seat Support	2	47	22421	KID T.M. Decal (Front and Rear) ...	2
23	21459	Retainer, Cargo Rod	1	48	22420	KID T.M. Decal (LH and RH)	2
24	21076	Rod, Cargo Deck	1	49	22425	Gasoline Decal	1
25	22324-1	Swim Vane	2	50	22423	Oil & Tires Decal	1
				51	22424	Serial I.D. Plate	1
				52	22584	Plug, Plastic	2
				53	22585	Plug, Plastic	4

Order Parts from your Nearest KID Dealer or Distributor

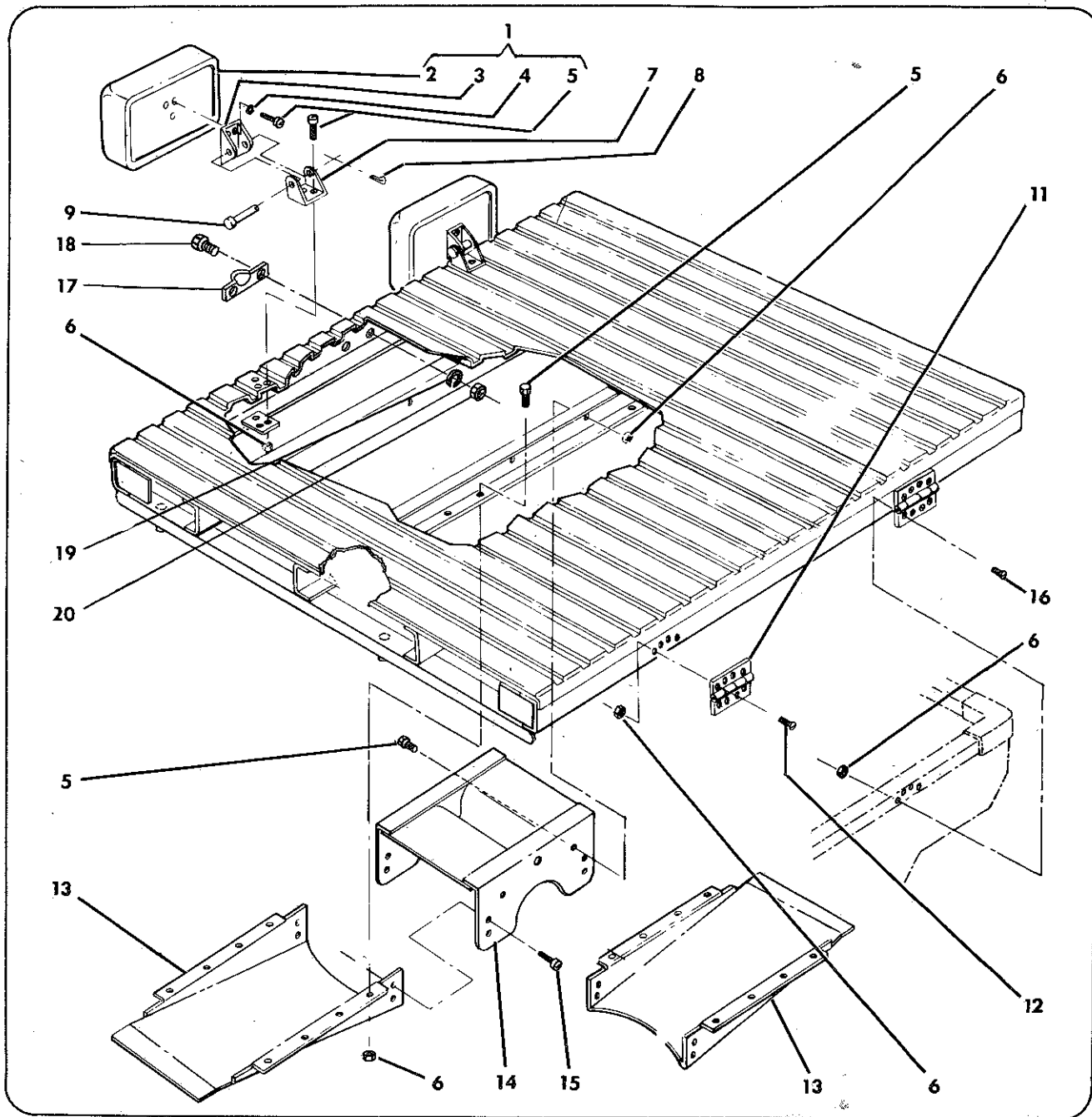
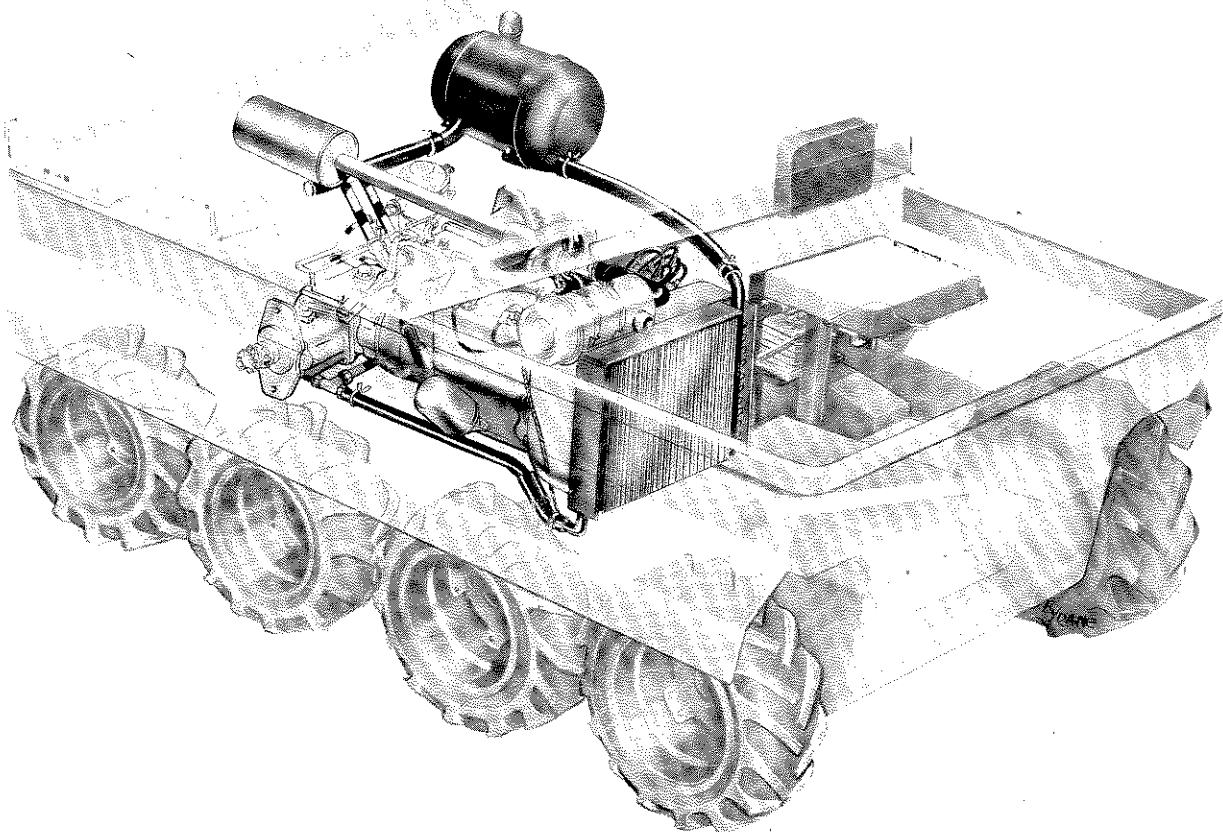


FIGURE I-2 CARGO DECK ASSEMBLY PART NO. 21762

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	21043	Seat Assembly, Back	2	11	22567	Hinge, Cargo Deck	2
2	21335	Seat Back Assembly	2	12	22568	Screw	8
3	21345	Bracket, Seat	2	13	21440	Panel, Exit Air Duct	2
4	21578	Lockwasher	6	14	21068	Panel Assembly, Exit Air Duct	1
5	21530	Screw	32	15	22468	Screw	8
6	21598-2	Locknut	42	16	22566	Screw	8
7	21766	Bracket, Hinge	2	17	22392-2	Bracket	1
8	21554	Cotter Pin	2	18	22403	Screw	2
9	21581	Hinge Pin	2	19	21199	Lockwasher	2
				20	21532	Nut	2

Order Parts from your Nearest KID Dealer or Distributor

SECTION II POWER TRAIN



The power train consists of four major units: the engine, the gearbox, and two hydrostatic transmissions.

The engine is a 4-cylinder air-cooled V-type engine. The crankcase is bolted to engine mounts in the lower hull of the KID. Two cylinder blocks of two cylinders each, bolt to the crankcase, and two cylinder head castings bolt to the cylinder blocks. The valves are in the cylinder castings, and are opened and closed by a camshaft near the crankshaft. The valve tappets have automatic valve rotators. The intake and exhaust systems are integral in one casting, which attaches over the valves. The engine uses a 12 volt distributor type ignition system, and carburetion is obtained by means of simple, fixed-jet carburetor that provides maximum performance and reliability. The engine runs at almost constant speed, with variations being corrected by a centrifugal type governor acting on the throttle.

The gearbox is actually a housing for the three gears that transmit torque from the engine crankshaft to the two transmissions. The gearbox is an integral casting with one oil seal for the PTO shaft.

The hydrostatic transmissions are identical except for output shaft direction. Each transmission consists of a variable displacement piston pump driving a variable displacement piston type hydraulic motor. The pump and motor are connected by means of a ported valve plate. A vane type replenishing pump keeps a constant fluid pressure on the other assemblies.

Major components of the transmission are: the housing, drive shaft, rotating group, swash plate, valve plate, and a yoke. The yoke governs the angle of the swash plate and consequently controls the stroke length of each piston. The output shaft is attached to the drive sprocket that turns the triple-strand chain.

The transmissions provide complete control throughout an unlimited range of operations and eliminate the necessity for different engine speeds. Therefore, the engine is governed to a nearly constant speed. By means of the swash plate and yoke, constant input can be varied to any desired output. This eliminates the need for a clutch, brake, or reduction gears, and provides full control through one control lever.

* ENGINE

PART NO. 21316

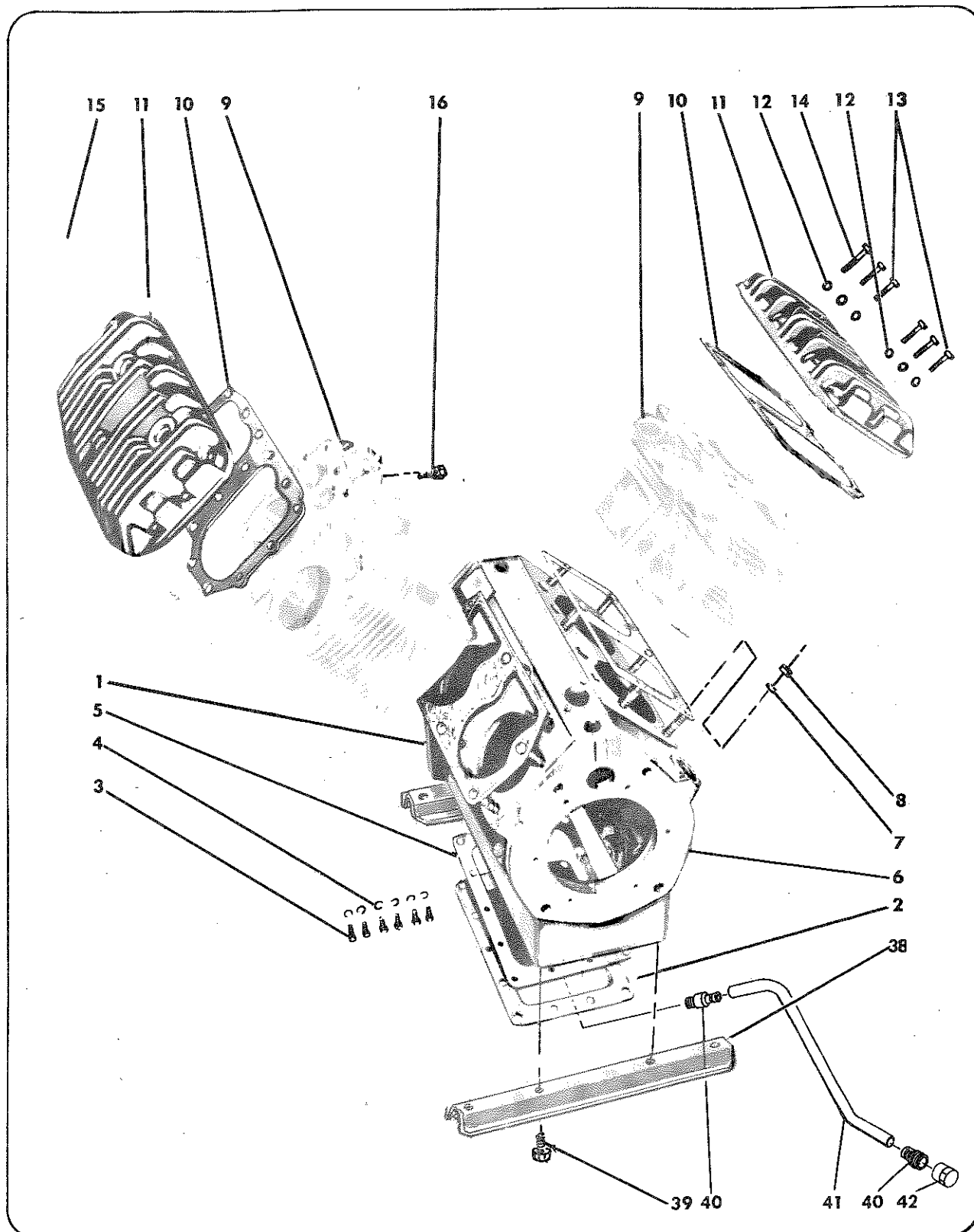


FIGURE II-1 CYLINDER HEAD AND CRANKCASE GROUP

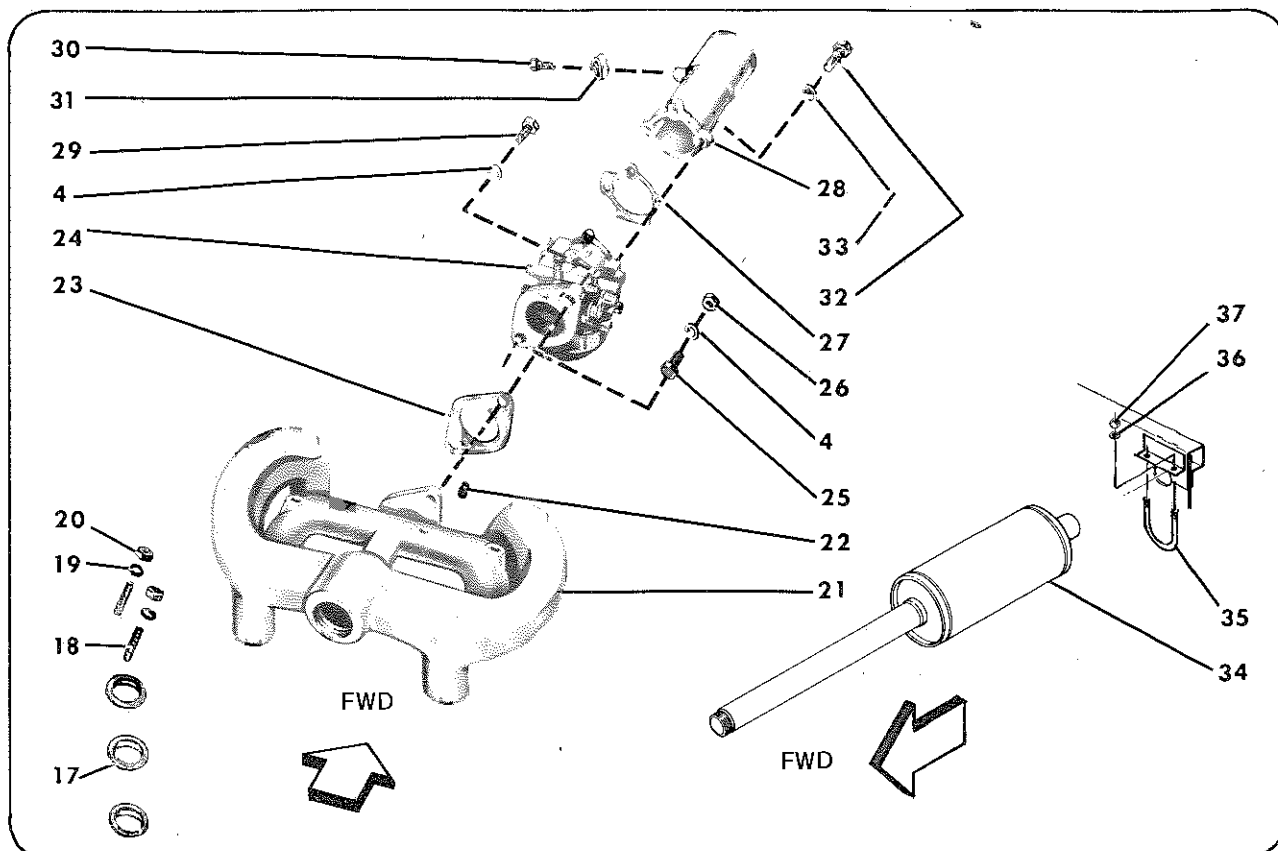


FIGURE II-1 (Cont'd.) MANIFOLD GROUP

REF NO	PART NO	DESCRIPTION	QTY	REF NO	PART NO	DESCRIPTION	QTY
1	24500	Crankcase Assembly (See Figure II-2)	1	20	24552	Nut, Manifold to Cylinder Block	4
2	24518	Crankcase Bottom Cover Plate	1	21	24553	Inlet and Exhaust Manifold, Outlet Toward PTO End	1
3	21570	Screw, Crankcase Bottom Cover Plate	14	22	24554	Plug, Inlet Manifold	1
4	21544	Lockwasher, Crankcase Bottom Cov. Plt. Carburetor	14	23	24555	Gasket, Carburetor Flange (Ref. only - See Fig. II-19)	1
5	24521	Gasket, Crankcase Bottom Cover Plate	1	24	24556	Carburetor, (See Figure II-19)	1
6	24522	Gasket, Cylinder Base	2	25	24557	Screw, Mounting Carburetor, Lower Hole	1
7	21534	Lockwasher, Cylinder Block to Crankcase	12	26	21543	Nut, Mounting Carburetor to Manifold	1
8	21865	Nut, Mounting Cylinder Block	12	27	24559	Gasket, Carb. Air Intake Adaptor	1
9	24525	Cylinder Block Assembly (See Figure II-6)	2	28	24560	Adaptor, Carburetor Air Intake	1
10	24541	Gasket, Cylinder Head	2	29	24561	Screw, Mounting Carburetor	1
11	24542	Cylinder Head	2	30	24562	Screw, Choke Control Clip	1
12	21893	Washer, Mounting Cylinder Heads	34	31	22467	Clamp, Cable	1
13	24544	Screw, Mounting Cylinder Heads	30	32	24564	Screw, Mounting Air Intake Adaptor	3
14	24545	Screw, (special hardness) Mounting Cylinder Heads	4	33	21199	Lockwasher, Mtg. Air Intake Adaptor to Carb.	3
15	24546	Spark Plug, Champion No. D-16 J	4	34	21059	Muffler Assy.	1
15	24547	Spark Plug, AC No. C86 Commercial	4	35	22460	U-Bolt	1
16	21576	Screw, Exhaust Manifold Tap	1	36	21573	Lockwasher	2
17	24550	Gasket, Manifold to Cylinder Block	6	37	21572	Nut	2
18	24535	Stud, Manifold to Cylinder Block (Ref. only - See Figure II-6)	4	38	22323	Member Assembly, Engine Mount	2
19	21599	Washer, Manifold to Cylinder Block	4	39	22410	Screw Engine Mount	4
				40	22348	Hose Fitting	2
				41	22350	Hose	1
				42	22349	Cap	1

Order parts from your nearest KID Dealer or Distributor

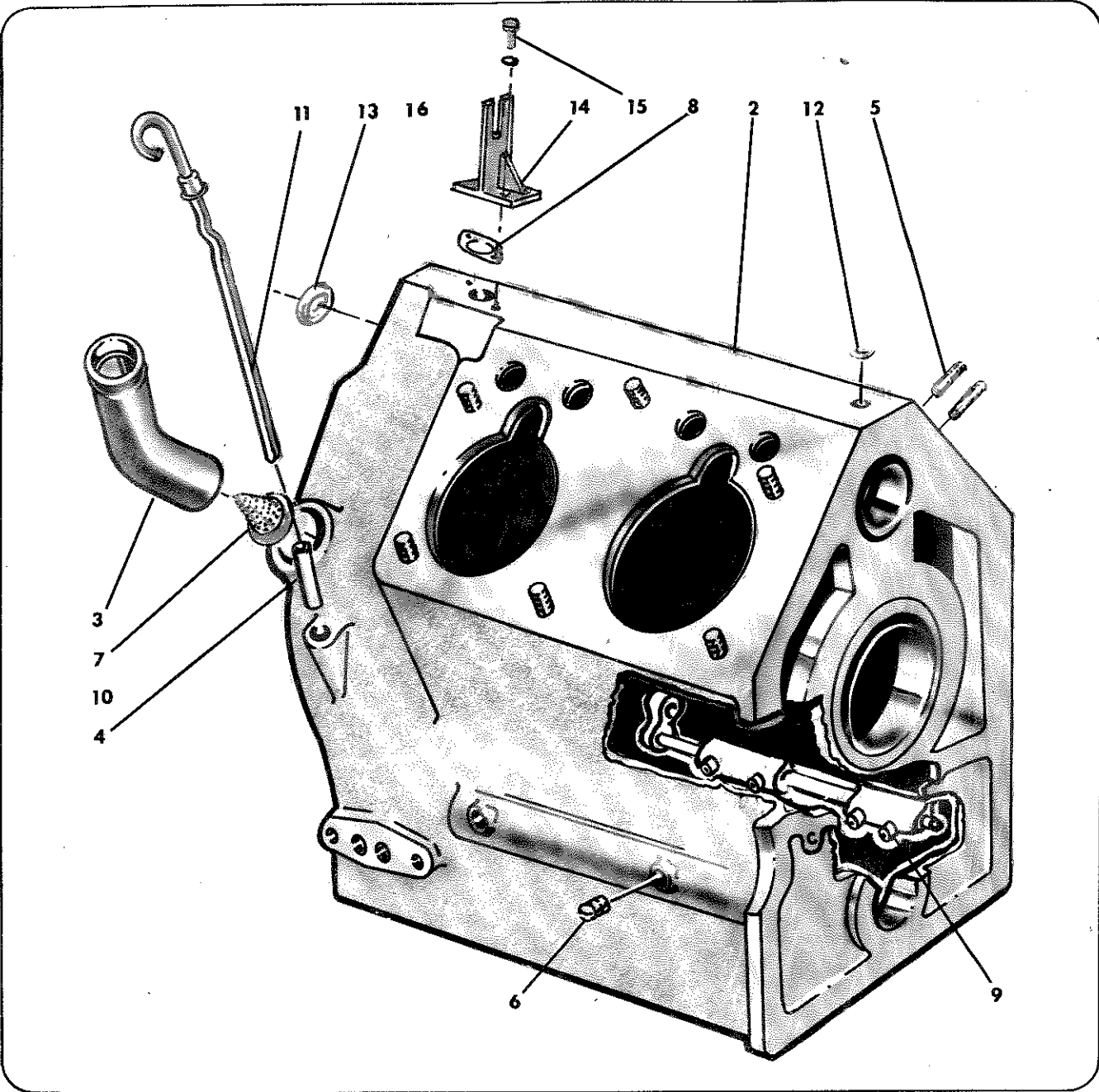


FIGURE II-2 CRANKCASE ASSEMBLY (REFERENCE NO. 1)

REF NO	PART NO	DESCRIPTION	QTY	REF NO	PART NO	DESCRIPTION	QTY
1	24500	Crankcase Assembly	1	11	24510	Dipstick	1
2	24501	Crankcase	1	12	24511	Plug, Expansion, 5/8" Camshaft Bearing Oil Hole	2
3	24502	Tube, Oil Filler	1	13	24512	Plug, Expansion, 1 3/8", Camshaft End Hole	1
4	24503	Stud, Crankcase to Cylinder Block	12	14	22557	Bracket, Control Cable (Ref. Only - See Figure IV-1)	
5	24504	Stud, Starter Bracket	2	15	21524	Screw	2
6	24505	Plug	7	16	21573	Lockwasher	2
7	24506	Screen, Oil Filler	1				
8	24507	Gasket, Control Cable Bracket	1				
9	24508	Nozzle, Oil Spray	4				
10	24509	Tube, Adaptor, Oil Dipstick	1				

Order parts from your nearest KID Dealer or Distributor

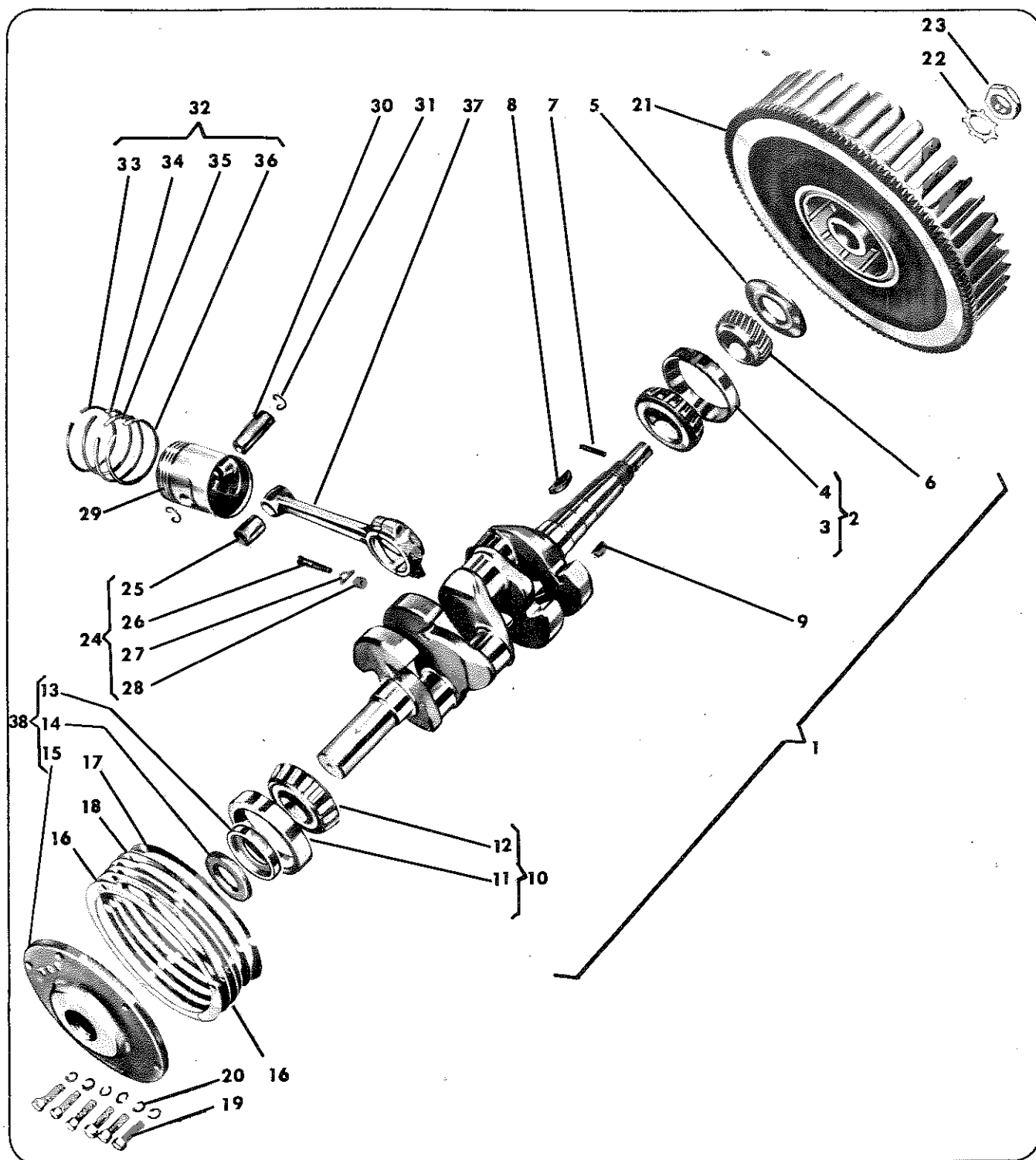


FIGURE II-3 CRANKSHAFT, PISTON AND CONNECTING ROD GROUP

REF NO	PART NO	DESCRIPTION	QTY
1	24566	Crankshaft Assembly, Includes Ref. Nos. 2, 6, 9, 10	1
2	24567	Main Bearing Assembly, Flywheel End, Includes Ref. Nos. 3 and 4	1

REF NO	PART NO.	DESCRIPTION	QTY
3	24568	Cone, Bearing	1
4	24569	Cup, Bearing	1
5	24570	Oil Sling, Crankshaft	1
6	24571	Gear, Crankshaft	1

(Cont'd)

Order parts from your nearest KID Dealer or Distributor

CRANKSHAFT, PISTON AND CONNECTING ROD GROUP (Cont'd)

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
7	24572	Pin, Hand Crank Starting, (Not required on KID)	1		24597	Connecting Rod Assembly, .020" Undersize	
8	24573	Key, No. 23 Woodruff, Mounting Flywheel	1	25	24598	Connecting Rod Assembly, .030" Undersize	
9	24574	Key, No. 8 Woodruff, Mounting Crankshaft Gear	1	26	24592	Bushing, Piston Pin	4
10	24575	Main Bearing Assembly, PTO End, Includes Ref. Nos. 11 and 12	1		24593	Connecting Rod Bolt Assembly, Includes Ref. No. 28	8
11	24576	Cup, Bearing	1	27	24595	Shim, Connecting Rod, .002" Thick ...	8
12	24577	Cone, Bearing	1	28	24594	Locknut, (Special), Connecting Rod Bolts	8
13	24578	Retainer, Main Bearing Oil Seal, Cork, PTO End	1	29	24599	Piston, Cam Ground, Standard Size ...	4
14	24579	Oil Seal, Main Bearing, PTO End	1		24519	Pistons, Cam Ground, .010" oversize	
15	24581	Bearing Plate	1		24600	Pistons, Cam Ground, .020" oversize	
16	24582	Gasket, Bearing Plate, .006" Thick	3		24601	Pistons, Cam Ground, .030" oversize	
17	24583	Gasket, Bearing Plate, .003" Thick	3	30	24602	Piston Pin, Standard Size	4
18	24584	Shim, Main Bearing Plate, .013" Thick	1		24603	Piston Pins, .005" Oversize	
19	22331	Screw, Main Bearing Plate, PTO End ...	6		24604	Piston Pins, .010" Oversize	
20	21537	Lockwasher, Main Bearing Plate, PTO End	6	31	24605	Ring, Retaining, Piston Pin	8
21	24587	Flywheel Assembly, Includes Magnetic Rotor and Ring Gear (Ref only - See Figure II-14)		32	24606	Piston Ring Set, Standard Size, Includes Ref. Nos. 33, 34, 35, 36	
22	24588	Lockwasher, Flywheel Nut	1	33	24608	Compression Ring, Chrome Faced, Top Groove	4
23	24589	Nut, Flywheel Mounting	1	34	24607	Compression Ring, 2nd Groove	4
24	24590	Connecting Rod Assembly (Standard), Includes Ref. Nos. 25, 26, 27, 37	4	35	24609	Scraper Ring, 3rd Groove	4
	24596	Connecting Rod Assembly, .010" Undersize		36	24610	Oil Ring, 4th Groove	4
					24611	Tri-Crome Re-Ring Set, Standard Size.	
					24612	Tri-Crome Re-Ring Set, .010" Oversize	
					24613	Tri-Crome Re-Ring Set, .020" Oversize	
					24614	Tri-Crome Re-Ring Set, .030" Oversize	
				37	24591	Rod --- (not serviced separately)	4
				38	24580	Main Bearing Plate Assembly Includes Ref. Nos. 13, 14, 15	1

AI

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	24615	Camshaft	1	8	24622	Lockwasher	3
2	24616	Spring, Camshaft Thrust Plunger	1	9	24557	Screw	3
3	24617	Thrust Plunger, Camshaft	1	10	24508	Nozzle, Oil Spray (Reference Only - See Figure II-2)	
4	24618	Valve Tappets, With Lockscrews (Includes Ref. No. 5)	8	11	24505	Plug (Ref. Only - See Figure II-2)	
5	24619	Lockscrews, Valve Tappet Adjusting ...	8	12	24623	Lockscrew, Oil Pump	1
6	24620	Gear, Camshaft	1				
7	24621	Button, Camshaft Thrust Plunger (Ref. Only - See Fig. II-8)					

Order parts from your nearest KID Dealer or Distributor

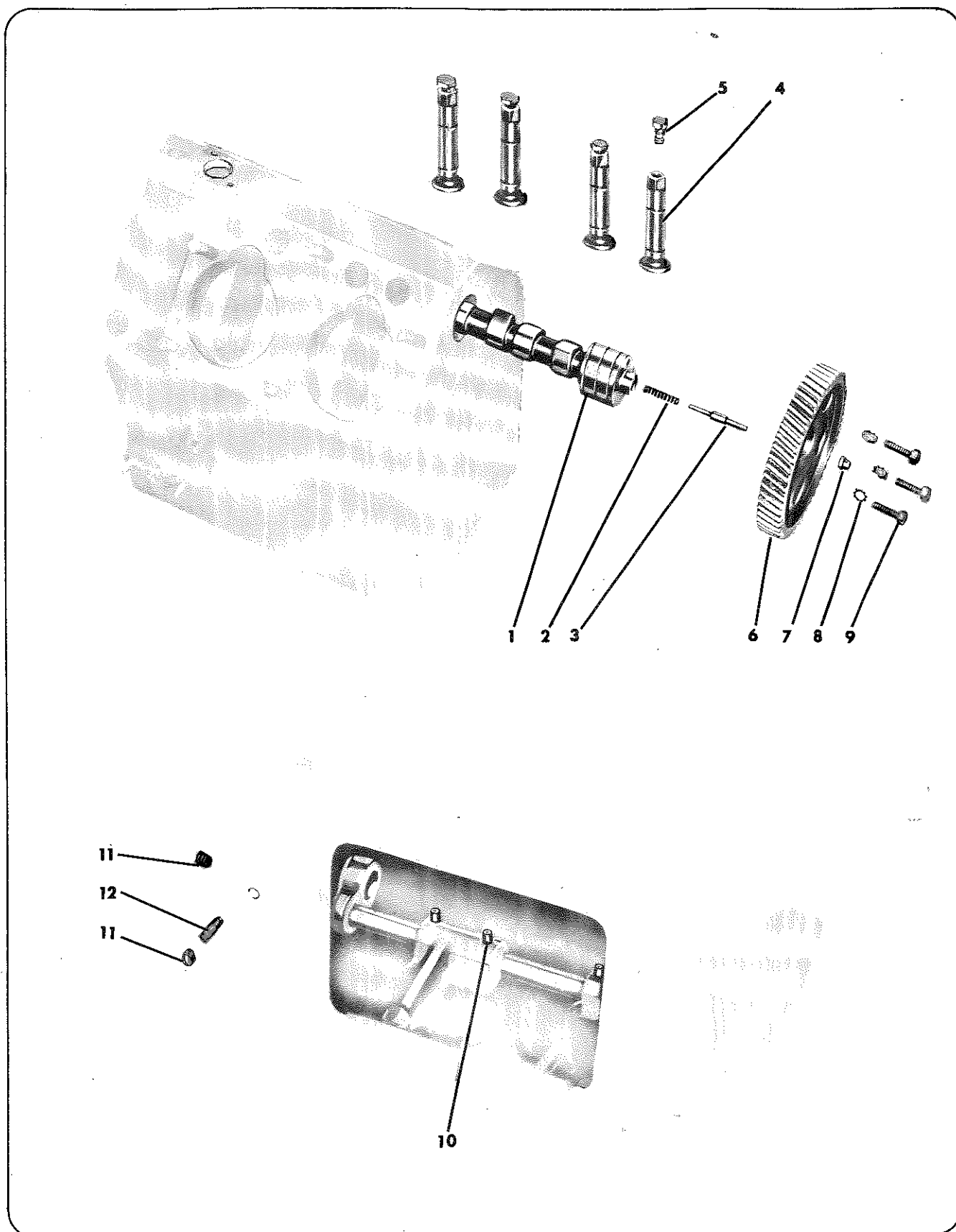
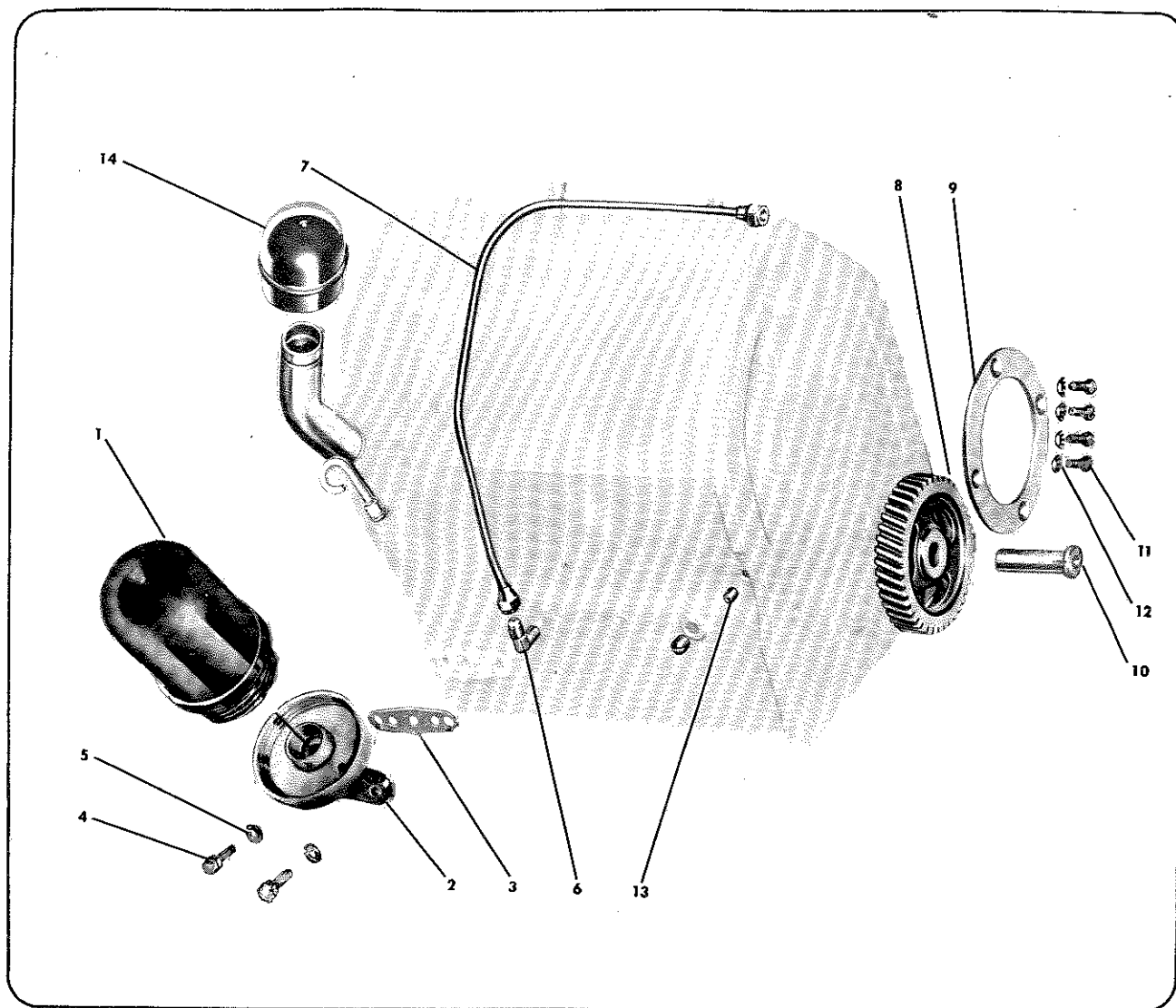


FIGURE II-4 CAMSHAFT MOUNTING GROUP, VALVE TAPPETS, AND OIL SPRAY NOZZLE GROUP



**FIGURE II-5 OIL FILTER, OIL LINE, IDLER GEAR AND BEARING
RETAINER PLATE MOUNTING GROUP**

REF NO	PART NO	DESCRIPTION	QTY	REF NO	PART NO	DESCRIPTION	QTY
1	24624	Cartridge, Oil Filter.....	1	7	24628	Oil Line, Crankcase to Governor	1
2	24625	Base Assembly, Oil Filter	1	8	24629	Gear, Idler	1
3	24626	Gasket, Oil Filter Base	1	9	24630	Plate, Bearing Retainer, Flywheel End ..	1
		Assembly Mounting	1	10	24631	Stud, Idler Gear	1
4	24557	Screw	2	11	24632	Screw	4
5	21544	Lockwasher	2	12	24633	Lockwasher	4
6	24627	Elbow, Oil Line to Governor, in Crankcase	1	13	24634	Screw, Idler Stud	1
				14	24516	Breather Cap, Oil Filler	1

Order parts from your nearest KID Dealer or Distributor

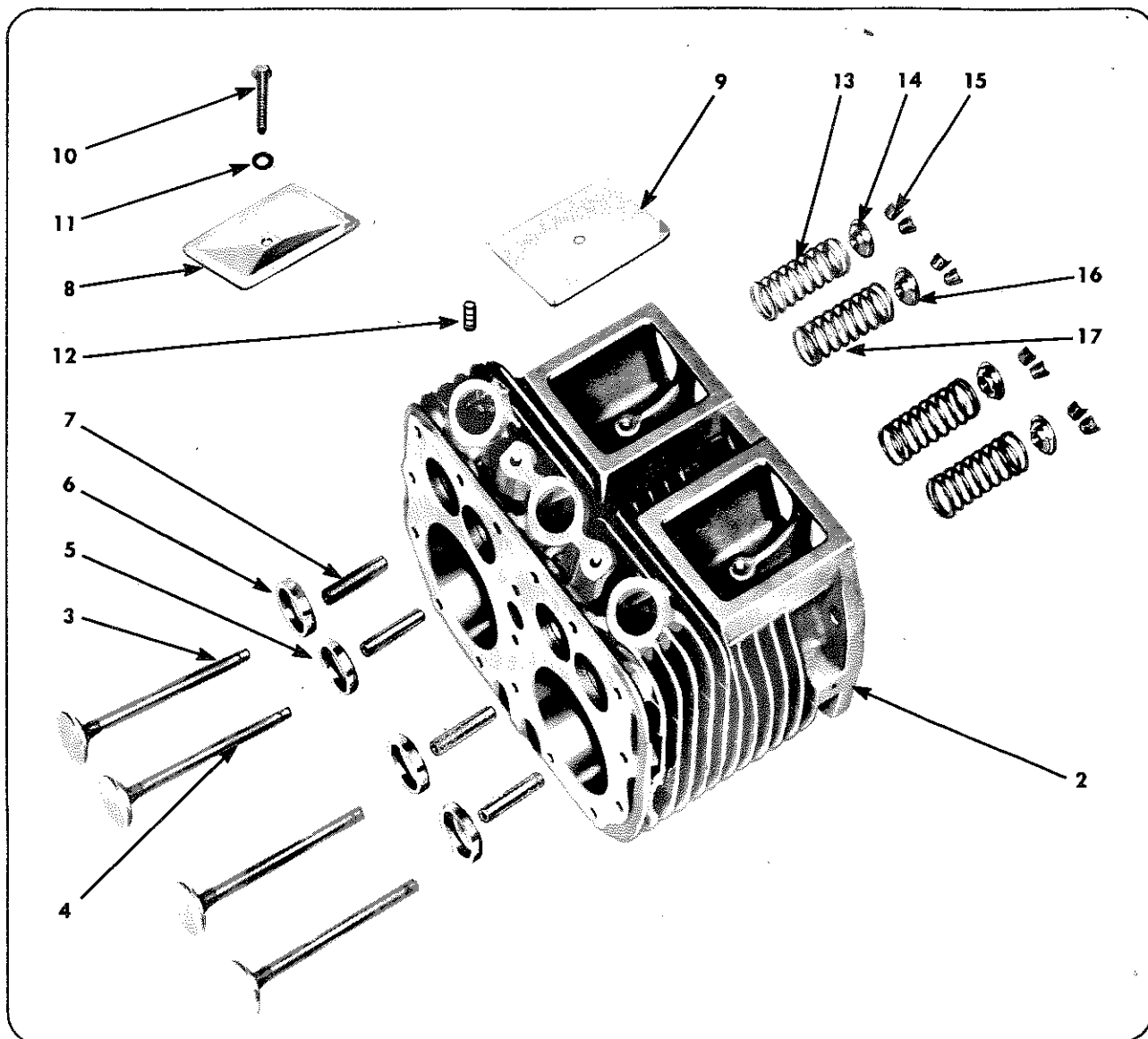


FIGURE II-6 CYLINDER BLOCK ASSEMBLY (Reference No. 1)

REF NO	PART NO	DESCRIPTION	QTY	REF NO	PART NO	DESCRIPTION	QTY
1	24525	Cylinder Block Assembly	2	10	22280	Screw	4
2	24514	Block, Cylinder	2	11	24534	Washer, Copper	4
3	24526	Valve, Exhaust Stellite	4	12	24535	Stud, Manifold to Cylinder Block	4
4	24527	Valve, Inlet	4	13	24536	Valve Spring, Exhaust	4
5	24528	Insert, Inlet Valve Seat	4	14	24537	Valve Rotator and Spring Seat, Exhaust	4
6	24529	Insert, Exhaust Valve Seat	4	15	24538	Lock, Valve Spring Seat	8 Pr.
7	24530	Guide, Valve Stem	8	16	24539	Seat, Inlet Valve Spring	4
8	24531	Cover Plate, Valve Inspection	4	17	24540	Valve Spring, Inlet	4
9	24532	Gasket	4				

Order parts from your nearest KID Dealer or Distributor

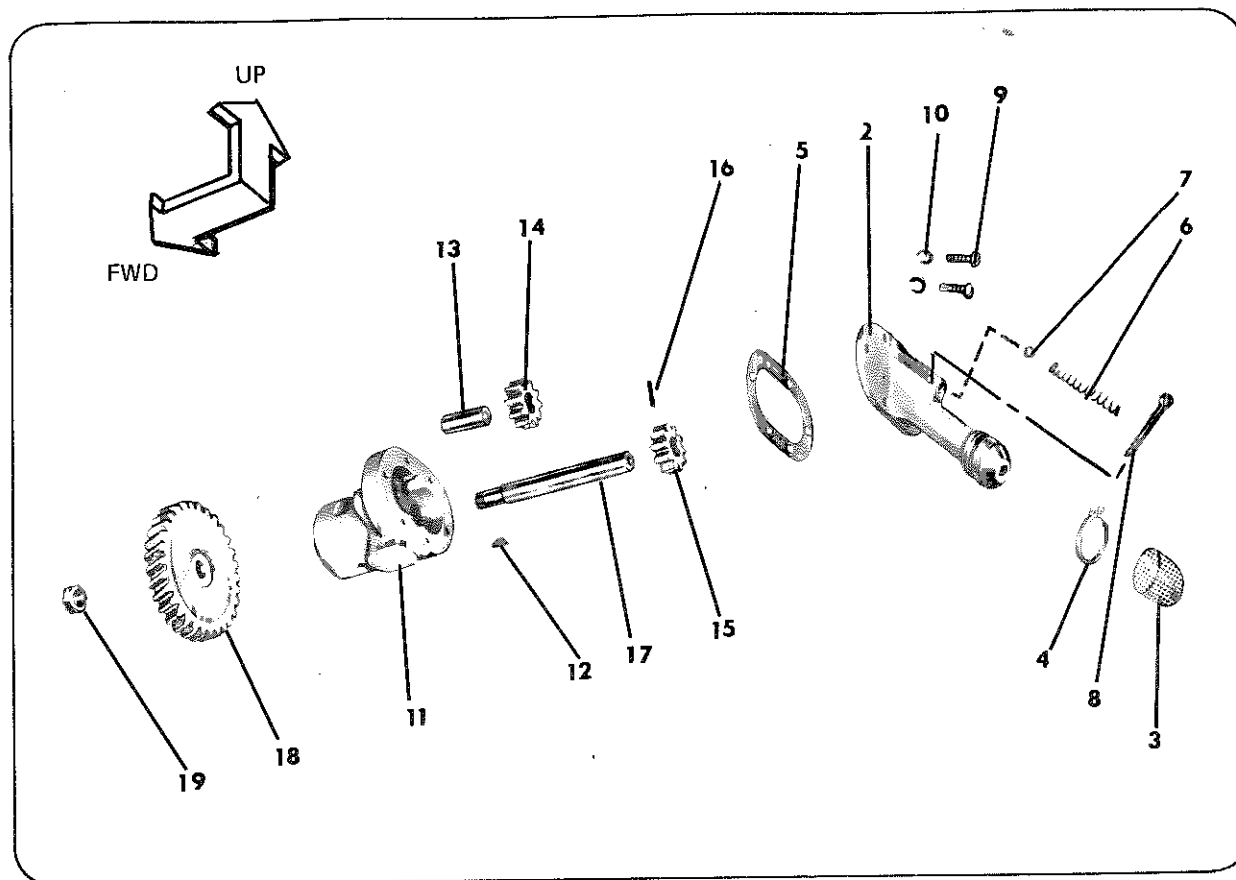


FIGURE II-7 OIL PUMP ASSEMBLY (Reference No. 1)

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	24635	Oil Pump Assembly	1	9	24643	Screw, Oil Pump Cover	6
2	24636	Cover Assembly, Includes Ref. Nos. 3, 4, 6, 7, 8	1	10	21199	Lockwasher	6
3	24637	Screen	1	11	24644	Body, Includes: Ref. Nos. 15 and 17 ...	1
4	24638	Snap Ring, Oil Pump Screen	1	12	24645	Key, No. 3 Woodruff, Oil Pump Gear ...	1
5	24639	Gasket, Oil Pump Cover (Not included in Gasket Set)	1	13	24646	Stub Shaft	1
6	24640	Spring, Oil Pump Relief Valve	1	14	24647	Gear, Driven	1
7	24641	Steel Ball, Oil Pump Relief Valve	1	15	24647	Gear, Driver	1
8	24642	Cotter Pin, Oil Pump Relief Valve Spring	1	16	24649	Pin, Oil Pump Gear	1
				17	24650	Drive Shaft, Includes: Ref. No. 14	1
				18	24651	Gear, Oil Pump Drive, (External)	1
				19	24652	Locknut, Gear Mounting	1

Order parts from your nearest KID Dealer or Distributor

REF NO.	PART NO.	DESCRIPTION	QTY
1	24653	Gear Cover Assembly, Includes: Ref. Nos. 2, 3, 9, 10	1
2	24654	Gear Cover (non serviceable)	1
3	24655	Oil Seal, Crankshaft, Flywheel End	1
4	24656	Gasket, Gear Cover	1
5	24657	Spacer, Gear Cover	1
6	24658	Gasket, Gear Cover Spacer to Crankcase	1
7	24544	Screw (special hardness)	10

REF NO.	PART NO.	DESCRIPTION	QTY
8	21544	Lockwasher	15
9	24515	Bushing, In Gear Cover for Governor Shaft	1
10	24621	Button, Camshaft Thrust Plunger	1
11	24660	Dowel Pin, Gear Cover	2
12	21570	Screw	5
13	21552	Screw, Mounting Spacer to Gear Cover	2
14	24534	Washer, Copper, Spacer to Crankcase (at Idler Gear)	2

17

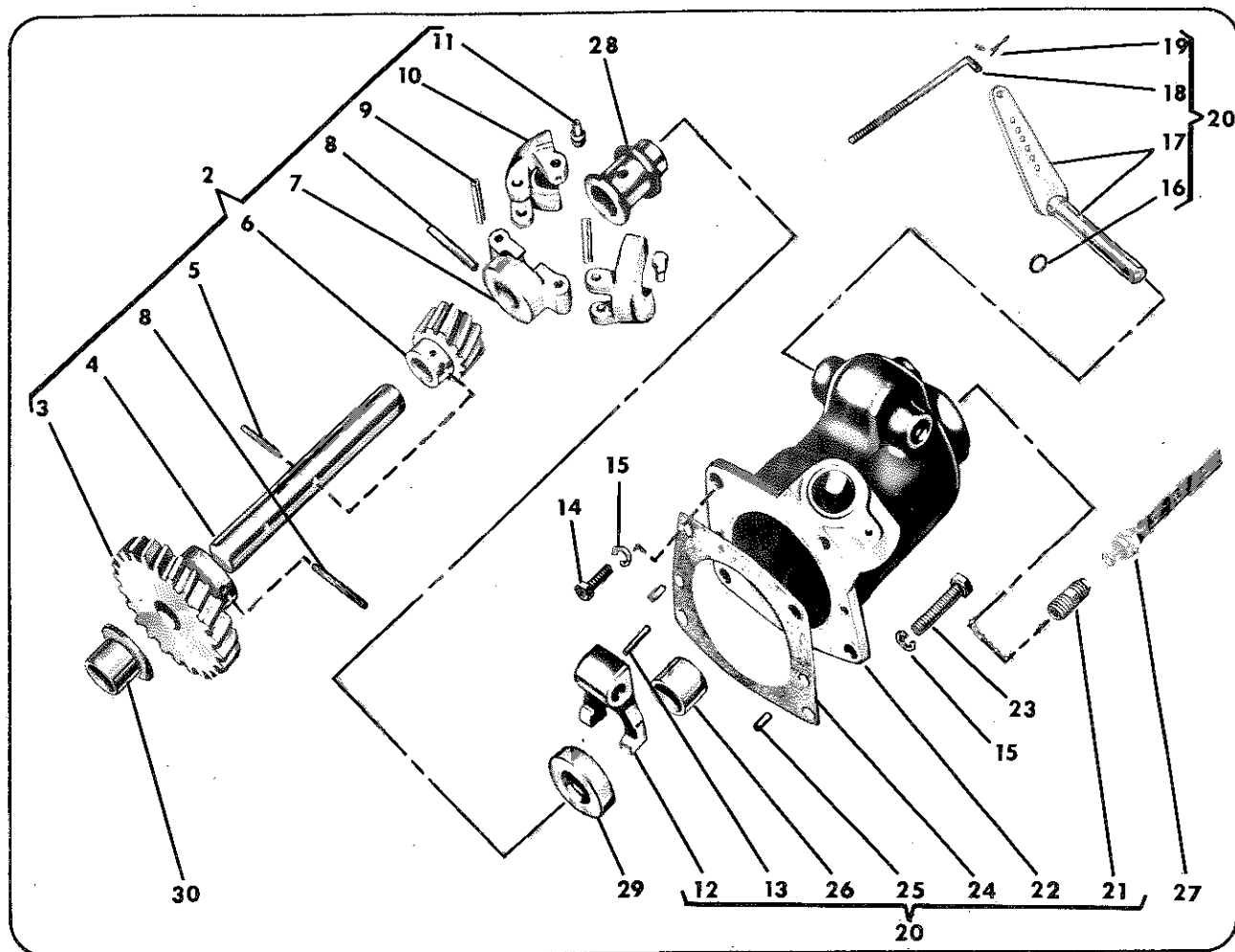


FIGURE II-9 GOVERNOR ASSEMBLY (Reference No. 1)

REF NO	PART NO	DESCRIPTION	QTY	REF NO	PART NO	DESCRIPTION	QTY
1	24662	Governor Assembly	1	17	24677	Cross Shaft and Lever	1
2	24663	Drive Shaft Assembly, Includes: Ref. Nos. 3, 4, 5, 6, 7, 8, 9, 10, 11	1	18	24678	Control Rod	1
3	24665	Governor Gear	1	19	24679	Cotter Pin, Control Rod	1
4	24666	Drive Shaft	1	20	24681	Governor Housing Assembly, Includes: Ref. Nos. 12, 13, 16, 17, 18, 19, 21, 22, 24, 25, 26	1
5	24667	Roll Pin, Distributor Drive Gear	1	21	24682	Straight Fitting, Oil Line	1
6	24668	Drive Gear, Distributor	1	22	24683	Housing (non serviceable)	1
7	24669	Flyweight Hub	1	23	24561	Screw	3
8	24670	Roll Pin, Hub and Governor Gear	2	24	24684	Gasket, Governor Housing	2
9	24671	Roll Pin, Flyweight	2	25	24685	Dowel Pin, Governor Housing	2
10	24672	Flyweight, Includes: Ref. No. 11	2	26	24659	Bushing	1
11	24673	Thrust Pin	2	27	24628	Oil Line, Crankcase to Governor (Reference Only, See Fig. II-5)	
12	24674	Yoke	1	28	24686	Thrust Sleeve, Includes: Ref. No. 29	1
13	24667	Roll Pin, Yoke	1	29	24687	Bearing	1
14	21552	Screw	1	30	24515	Bushing (Reference Only, See Figure II-8)	
15	21544	Lockwasher	4				
16	24676	"O" Ring, Cross Shaft	1				

Order parts from your nearest KID Dealer or Distributor

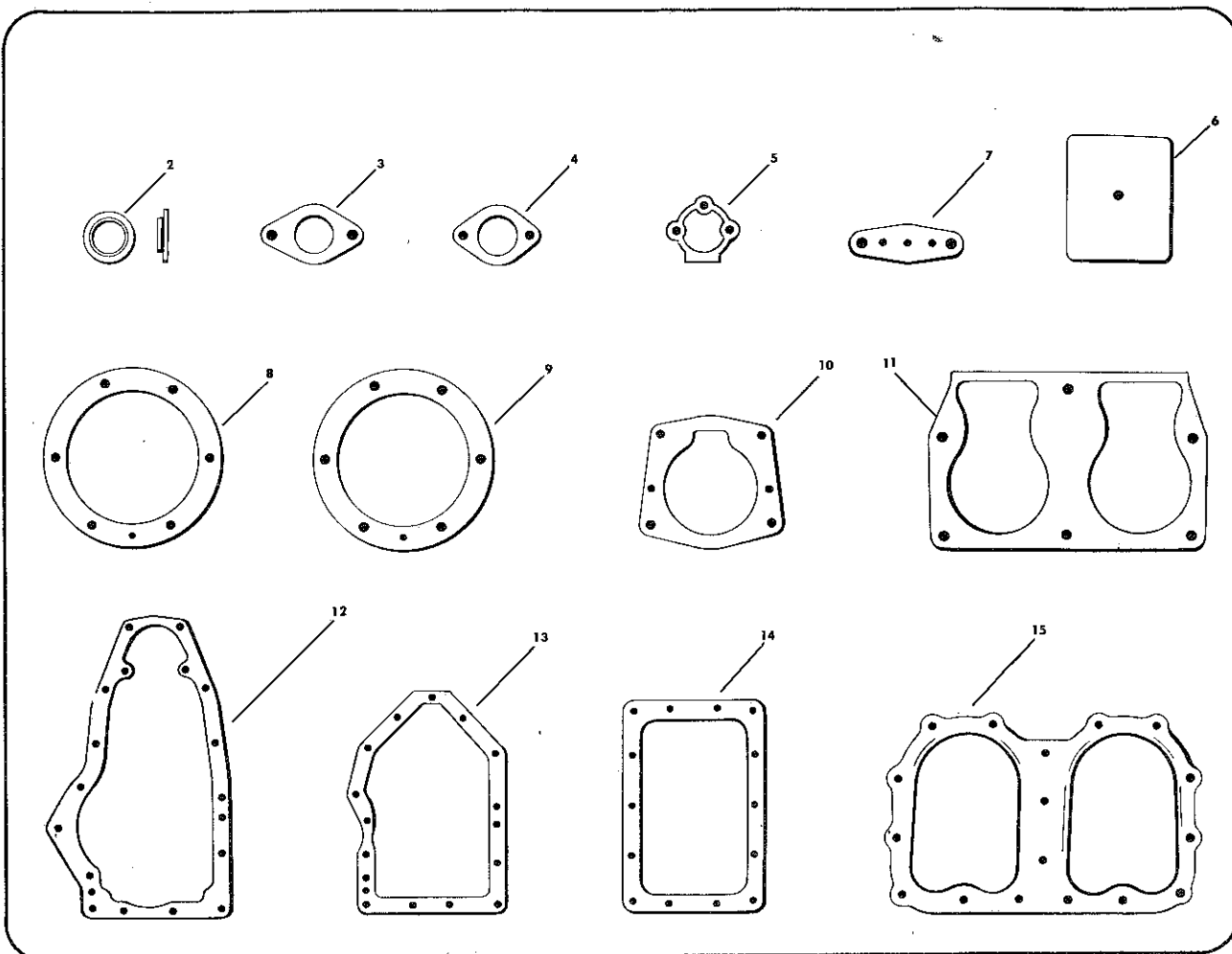


FIGURE II-10 GASKET SET (Reference No. 1)

REF NO	PART NO	DESCRIPTION	QTY	REF NO	PART NO	DESCRIPTION	QTY
1	24517	Gasket Set	1	8	24582	Gasket, .006" Thick, Bearing Plate	3
2	24550	Gasket, Manifold to Cylinder Block	6	9	24583	Gasket, .003" Thick, Bearing Plate	3
3	24555	Gasket, Carburetor Flange	1	10	24684	Gasket, Governor Housing	2
4	24507	Gasket, Control Cable Bracket	1	11	24522	Gasket, Cylinder Base	2
5	24559	Gasket, Carburetor to Air Intake Adaptor	1	12	24656	Gasket, Gear Cover	1
6	24532	Gasket, Valve Inspection Cover Plate	4	13	24658	Gasket, Gear Cover Spacer to Case	1
7	24626	Gasket, Oil Filter Mounting	1	14	24521	Gasket, Crankcase Bottom Cover	1
				15	24541	Gasket, Cylinder Head	2
				16	24648	Valve Grinding Gasket Set, Includes: Ref. Nos. 2, 6, 15	1

Order parts from your nearest KID Dealer or Distributor

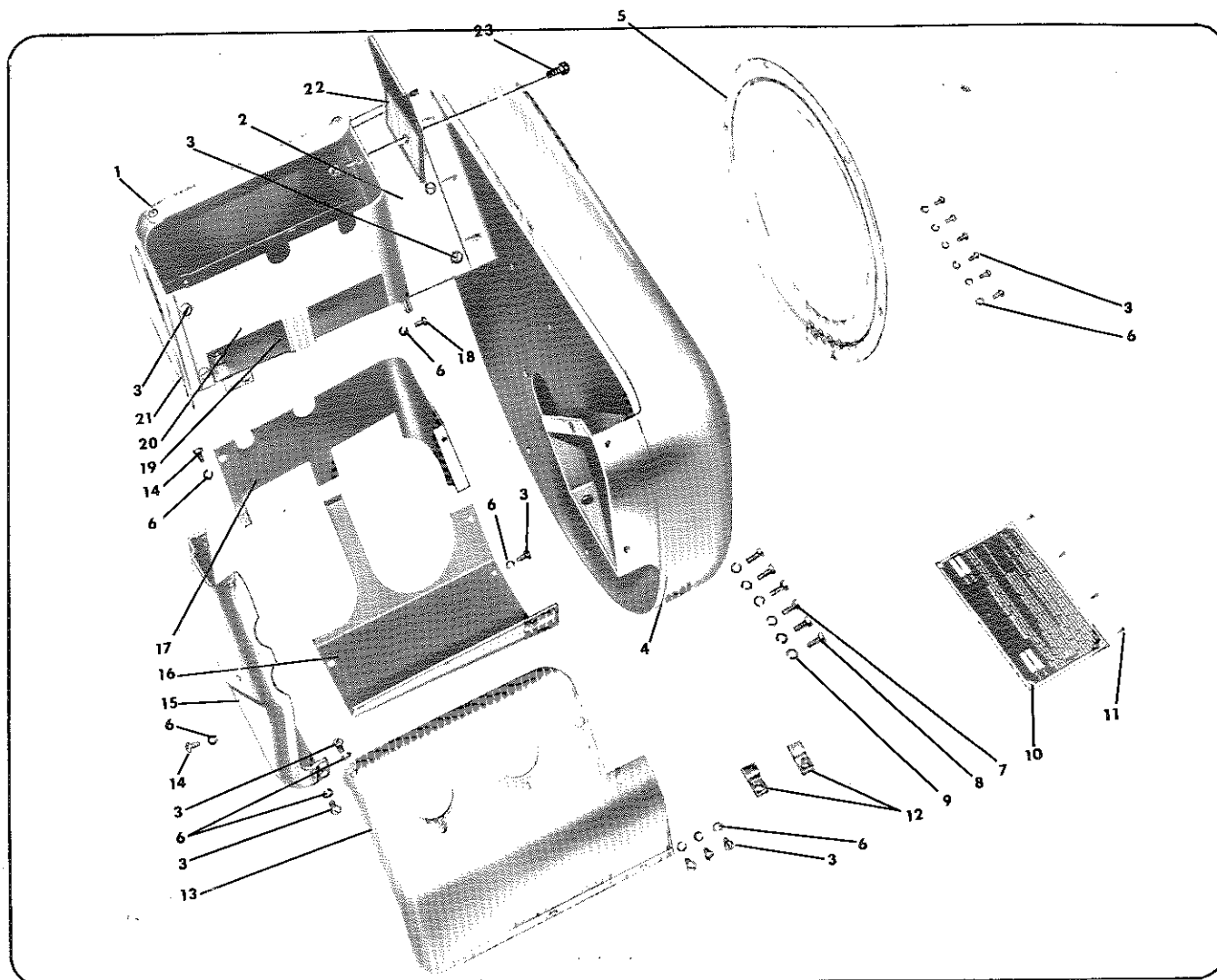


FIGURE II-11 AIR SHROUDING

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY.
1	24688	Cylinder Head Shroud, #2 and #4 Cylinders	1	15	24699	Rear Shroud Cover, #1 and #3 Cylinders	1
2	24689	Side Cover, Flywheel Shroud	1	16	24700	Lower Cylinder Shroud, #1 and #3 Cylinders	1
3	21576	Screw	33	17	24701	Cylinder Heat Deflector, #1 and #3 Cylinders	1
4	24690	Flywheel Shroud	1	18	21579	Screw, Cylinder Heat Deflector	4
5	24691	Ring, Flywheel Shroud	1	19	24703	Lower Cylinder Shroud, #2 and #4 Cylinders	1
6	21573	Lockwasher	39	20	24704	Cylinder Heat Deflector, #2 and #4 Cylinders	1
7	24692	Screw, Flywheel Shroud (2 center holes)	2	21	24705	Rear Shroud Cover, #2 and #4 Cylinders	1
8	24693	Screw, Flywheel Shroud	4	22	24664	Distributor Heat Deflector	1
9	21544	Lockwasher	6	23	24698	Screw, Self-tapping, Distributor Heat Deflector	1
10	24694	Engine Instruction and Name Plate	1				
11	24695	Rivet, 964 x 1/4, Mounting Name Plate	4				
12	24696	Clip, Spark Plug Ignition Cables	2				
13	24697	Cylinder Head Shroud, #1 and #3 Cylinders	1				
14	21524	Screw, Rear Shroud (top holes) and Cylinder Heat Deflector, #1 and #3 Cylinders	4				

Order parts from your nearest KID Dealer or Distributor

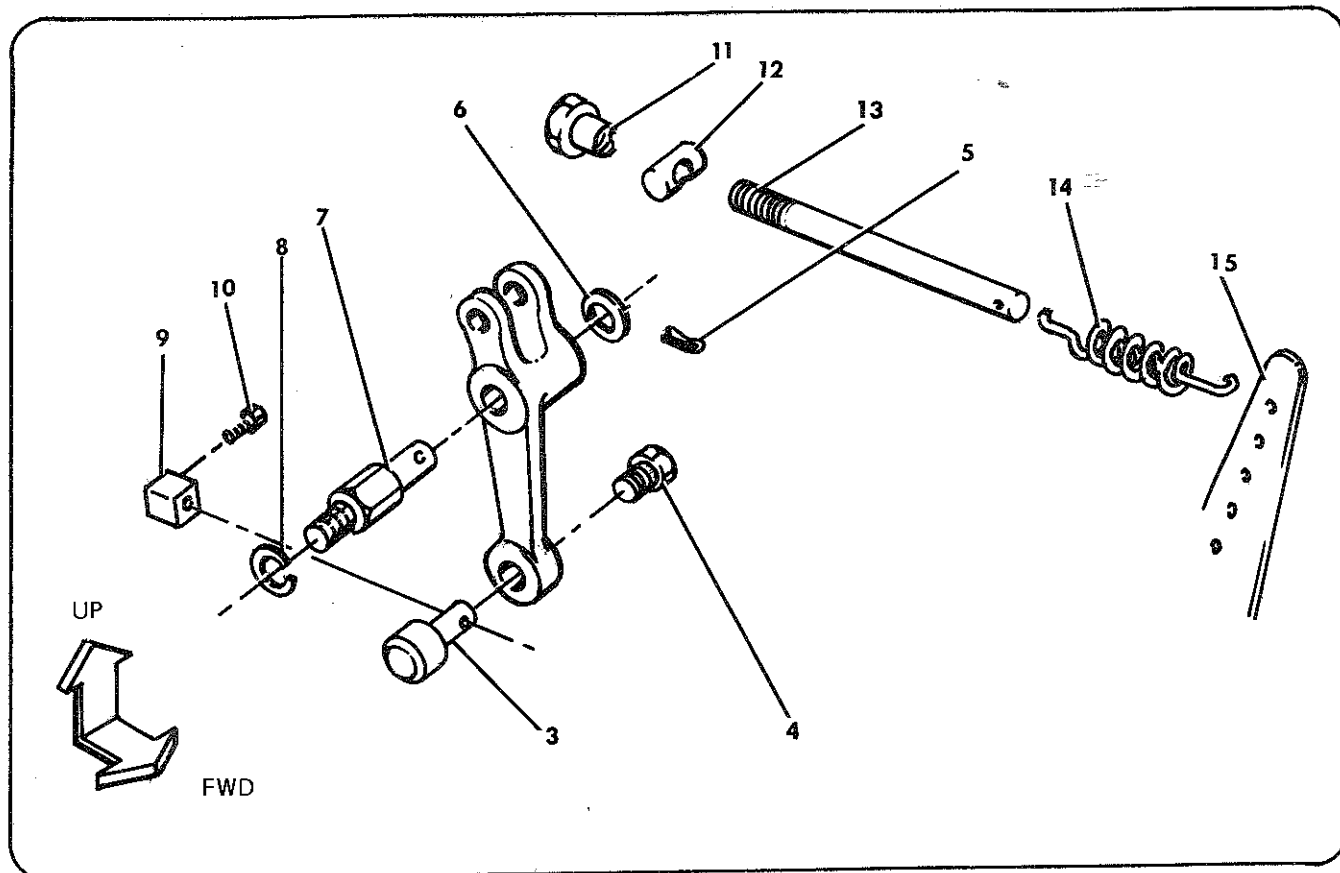


FIGURE II-12 GOVERNOR CONTROL ASSEMBLY (Reference No. 1)

REF. NO.	PART NO.	DESCRIPTION	QTY.	REF. NO.	PART NO.	DESCRIPTION	QTY.
1	24706	Governor Control Assy	1	8	21573	Lockwasher	1
2	24707	Variable Speed Lever	1	9	24712	Stop Block	1
3	24708	Swivel Block	1	10	24713	Screw, Stop Block	1
4	24709	Screw, Swivel Block	1	11	24714	Locknut, Adjusting Screw	1
5	21554	Cotter Pin, Fulcrum Pin	1	12	24715	Pin, Adjusting Screw Swivel	1
6	21893	Washer, Variable Speed Lever	1	13	24716	Adjusting Screw	1
7	24711	Fulcrum Pin, Variable Speed Lever Support	1	14	24680	Spring, Governor Control	1
				15	24677	Cross Shaft and Lever (Reference Only - See Figure 11-9)	

Order parts from your nearest KID Dealer or Distributor

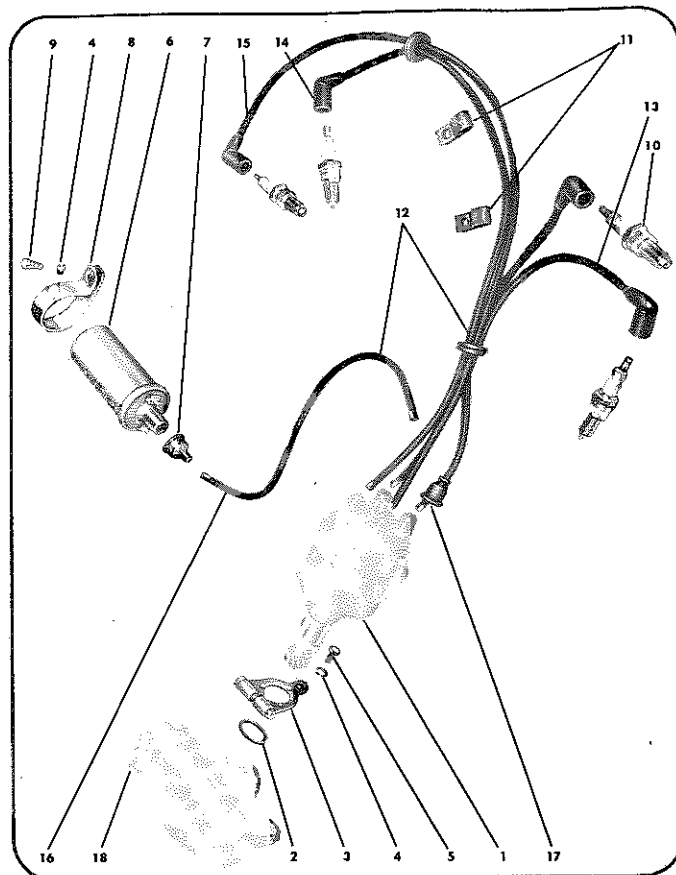


FIGURE II-13 IGNITION COIL AND DISTRIBUTOR GROUP

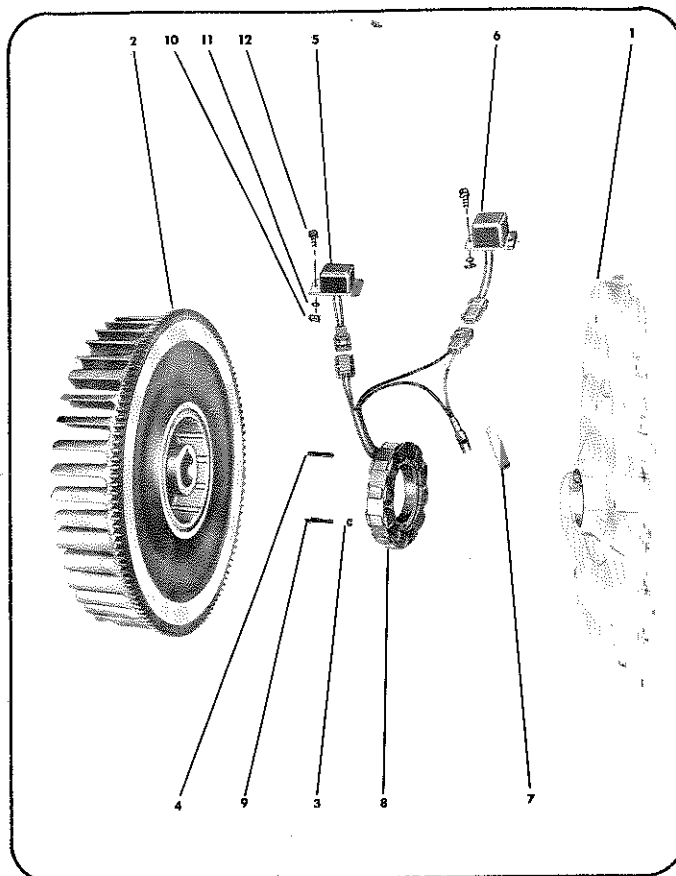


FIGURE II-14 FLYWHEEL ALTERNATOR GROUP

REF NO	PART NO	DESCRIPTION	QTY
1	24717	Distributor Assembly, (Reference Only - See Figure II-16)	
2	24718	"O" Ring	1
3	24719	Advance Arm Assembly	1
4	21573	Lockwasher, Advance Arm Lock and Ignition Coil Mounting	2
5	21571	Screw, Advance Arm Mounting	1
6	24721	Ignition Coil (12 vlt)	1
7	24722	Terminal Protector, Ignition Coil	1
8	24723	Bracket, Coil	1
9	24724	Screw, Ignition Coil Mounting	1
10	24546	Spark Plugs (Reference Only, See Figure II-1)	
11	24696	Clip, Ignition Cables (Reference Only, See Figure II-11)	
12	24726	Distributor Ignition Cable Set, Includes: Ref. Nos. 7, 13, 14, 15, 16, 17	1
13	24727	Cable, #2 and #4 Cylinders	2
14	24728	Cable, #1 Cylinder	1
15	24729	Cable, #3 Cylinder	1
16	24730	Cable, Coil to Distributor	1
17	24731	Terminal Protectors	5
18	24662	Governor Assembly (Reference Only, See Figure II-9)	

REF NO	PART NO	DESCRIPTION	QTY
1	24653	Gear Cover Assembly (Reference Only, See Figure II-8)	
2	24587	Flywheel Assembly, Includes Magnetic Rotor and Ring Gear	1
3	21199	Lockwasher, Stator	4
4	24732	Roll Pin, Stator	2
5	24733	Rectifier Module	1
6	24734	Regulator Module	1
7	24735	Insulator, Wire Connector	1
8	24737	Stator	1
9	24738	Screw, Stator	4
10	24739	Nut, Mounting Modules	4
11	24740	Lockwasher, Mounting Modules	4
12	24643	Screw, Mounting Modules	4

Order parts from your nearest KID Dealer or Distributor

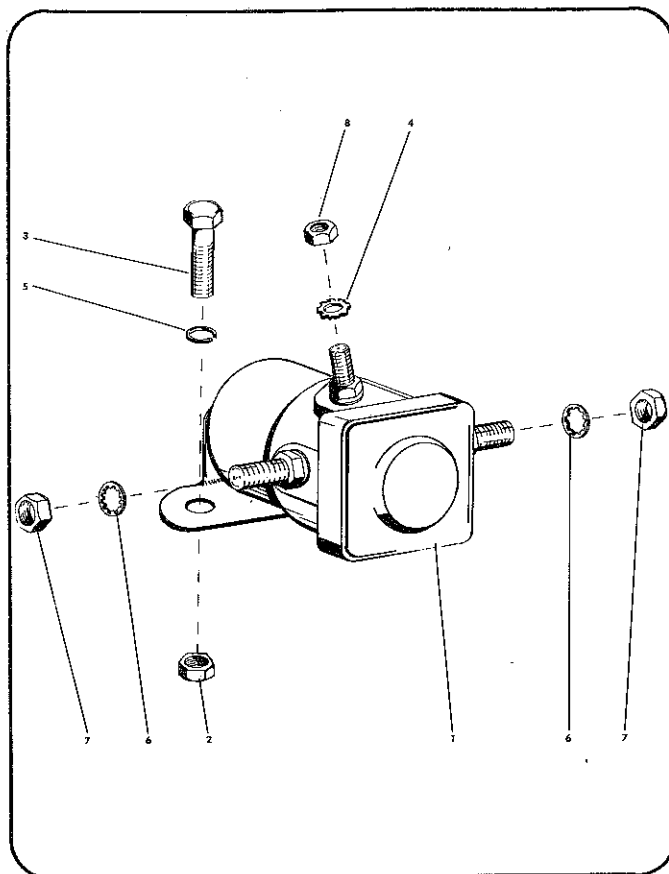


FIGURE II-15 SOLENOID STARTING SWITCH GROUP

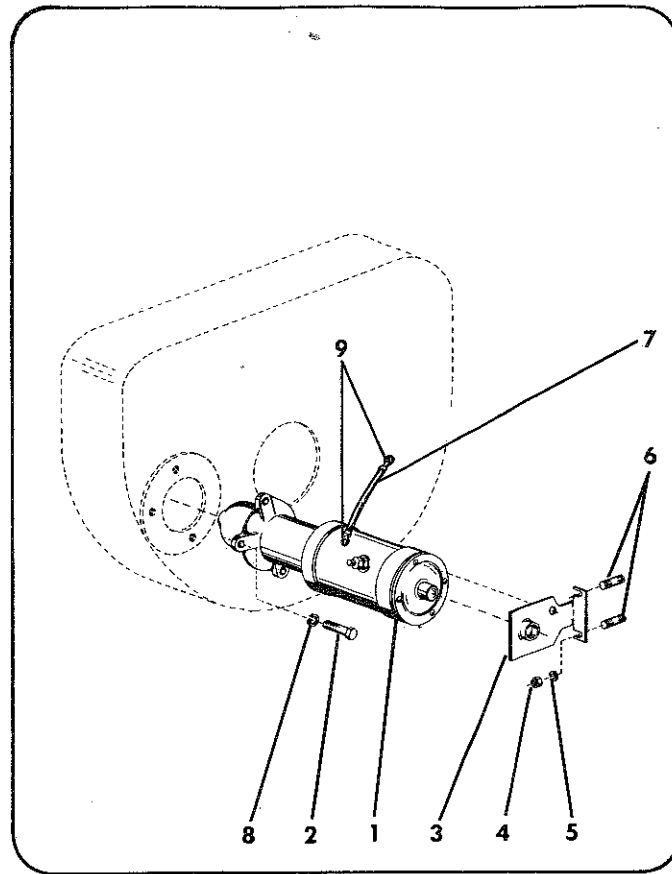


FIGURE II-16 STARTING MOTOR GROUP

REF NO.	PART NO.	DESCRIPTION	QTY
1	24741	Solenoid Starting Switch	1
2	21572	Nut	2
3	21579	Screw	2
4	24743	Lockwasher, Cad. Pl.	1
5	21573	Lockwasher	2
6	24744	Lockwasher, Cad. Pl.	2
7	24745	Nut, Cad. Pl.	2
8	24746	Nut, Cad. Pl.	1

REF NO.	PART NO.	DESCRIPTION	QTY
1	24748	12 Volt Starting Motor (Reference Only - See Figure II-17)	
2	21840	Screw	3
3	24750	Bracket, Starter Support	1
4	21555	Nut	2
5	21544	Lockwasher	2
6	24504	Stud, Starter Bracket (Reference Only, See Figure II-2)	
7	22462	Starter Cable Assembly	1
8	21537	Lockwasher	3
9	21610	Connector	2

Order parts from your nearest KID Dealer or Distributor

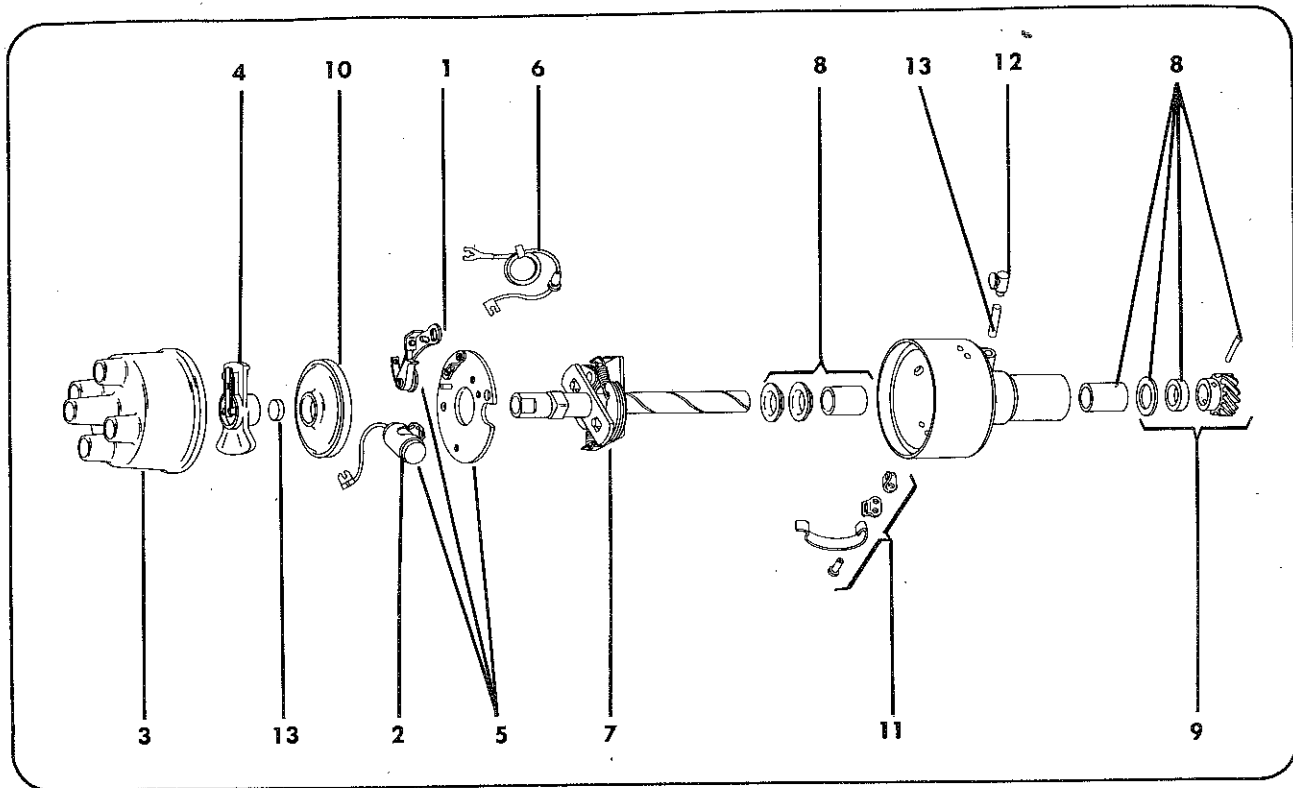


FIGURE II-17 DISTRIBUTOR ASSEMBLY PART NUMBER 24717

REF NO	PART NO	DESCRIPTION	QTY	REF NO	PART NO	DESCRIPTION	QTY
1	24761	Breaker Contact Set	1		24775	Thrust Washer (outer), drive shaft	1
2	24762	Condenser Package	1		24776	Thrust Washer, drive shaft (lower)	1
3	24754	Cap Assembly	1	9	24777	Gear and Parts Package	1
4	24755	Rotor	1			Consisting of:	
5	24759	Breaker Plate Assembly	1		24778	Follower Gear	1
		Consisting of:			24772	Pin, gear	1
	24760	Breaker Plate	1		24773	Spacer	1
	24761	Breaker Contact Set	1		24776	Thrust Washer, drive shaft (lower)	1
	24762	Condenser Package	1	10	24779	Dust Cover Assembly	1
	24763	Spring Clip, contact arm	1			Includes:	
	24764	Screw, spring clip	1		24780	Felt Washer	1
	24765	Screw, condenser mounting	1	11	24781	Cap Clamp Spring Package	1
	24766	Lockscrew, breaker contact	1			Consisting of:	
	24767	Flat Washer, contact lock screw	1		24782	Bracket, breaker plate mt'g	2
	24768	Flat Washer, spring clip screw	1		24783	Bracket, cap spring	2
	24769	Screw for breaker plate mounting	2		24784	Rivet, brackets	4
6	24756	Primary Lead Assembly	1		24785	Clamp Spring, cap	2
7	24757	Governor Shaft and Cam Assembly	1	12	24758	Oiler	1
8	24770	Bearing and Parts Package	1	13	24786	Wick and Washer Package*	1
		Consisting of:				Consisting of:	
	24771	Bronze Bearing	2		24787	Felt Wick, cam sleeve	1
	24772	Pin, gear	1		24788	Felt Wick, oiler	1
	24773	Spacer, gear	1				
	24774	Thrust Washer (inner), drive shaft	1				

*Contains additional parts to service other applications.

Order parts from your nearest KID Dealer or Distributor

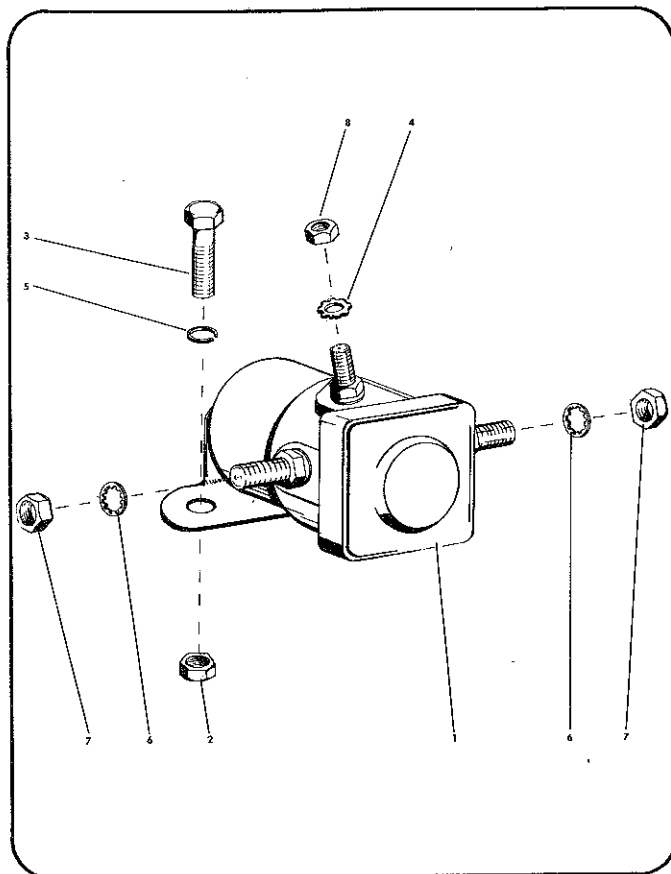


FIGURE II-15 SOLENOID STARTING SWITCH GROUP

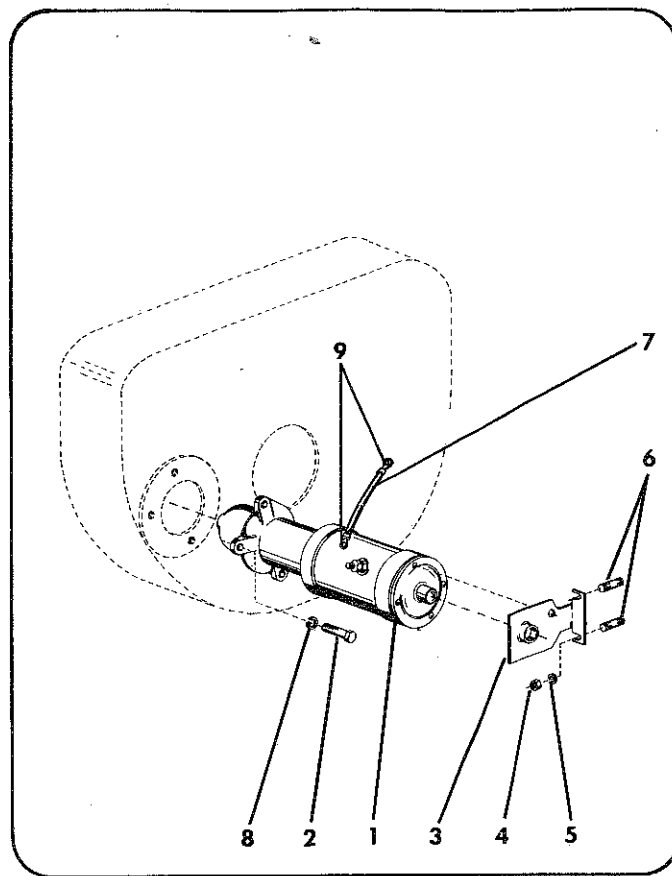


FIGURE II-16 STARTING MOTOR GROUP

REF NO	PART NO	DESCRIPTION	QTY
1	24741	Solenoid Starting Switch	1
2	21572	Nut	2
3	21579	Screw	2
4	24743	Lockwasher, Cad. Pl.	1
5	21573	Lockwasher	2
6	24744	Lockwasher, Cad. Pl.	2
7	24745	Nut, Cad. Pl.	2
8	24746	Nut, Cad. Pl.	1

REF NO	PART NO	DESCRIPTION	QTY
1	24748	12 Volt Starting Motor (Reference Only - See Figure II-17)	
2	21840	Screw	3
3	24750	Bracket, Starter Support	1
4	21555	Nut	2
5	21544	Lockwasher	2
6	24504	Stud, Starter Bracket (Reference Only, See Figure II-2)	
7	22462	Starter Cable Assembly	1
8	21537	Lockwasher	3
9	21610	Connector	2

Order parts from your nearest KID Dealer or Distributor

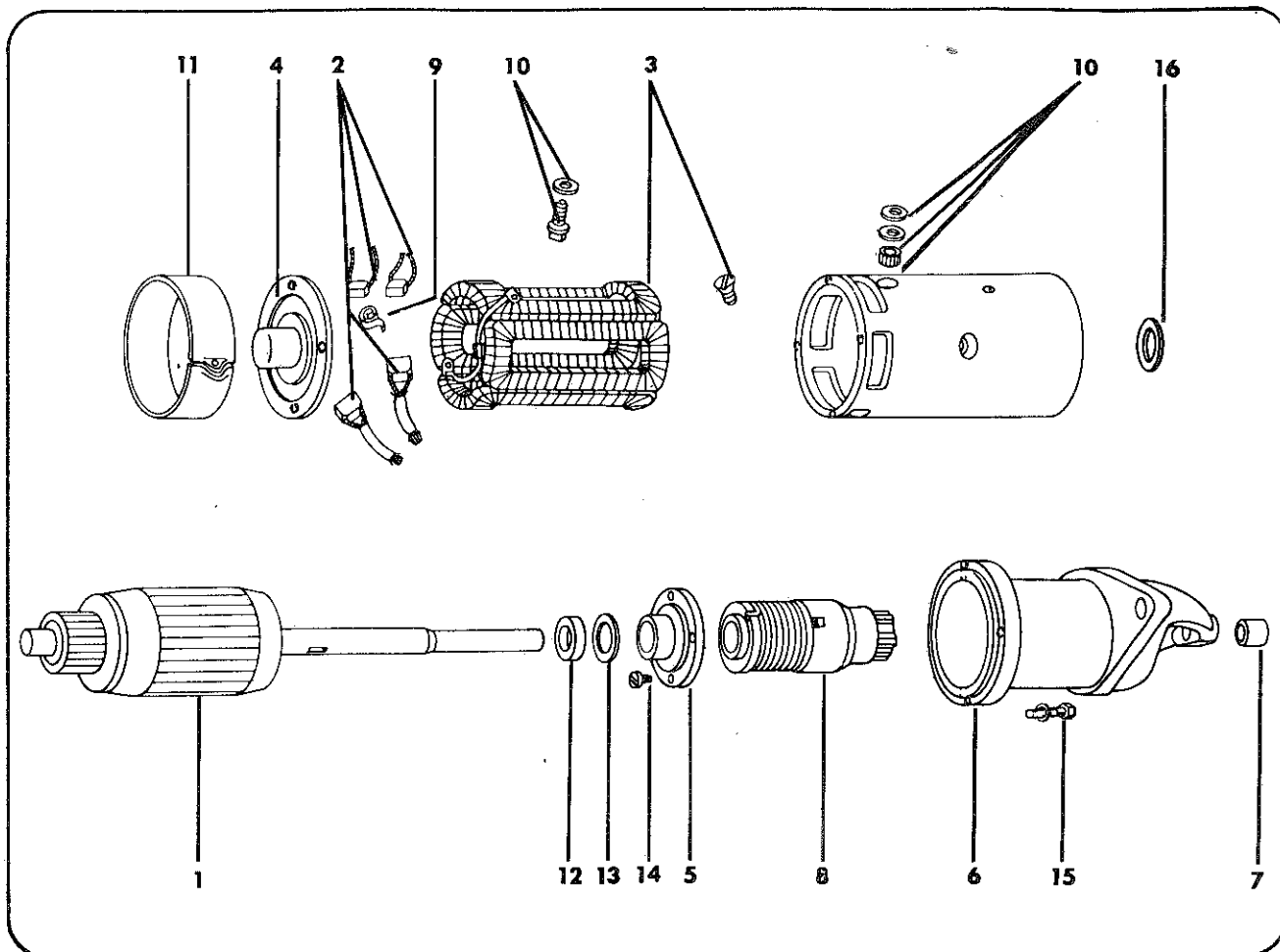


FIGURE II-18 12 VOLT STARTING MOTOR PART NO. 24748

REF NO	PART NO	DESCRIPTION	QTY	REF NO	PART NO	DESCRIPTION	QTY
1	24802	Armature	1	7	24812	Bronze Bearing	1
2	24803	Brush Set	1	8	24815	Bendix Drive	1
3	24804	Field Coil Package	1	9	24809	Brush Spring Set	1
		Includes:		10	24816	Terminal Stud Package	1
	24805	Screw, pole shoe	4			Includes:	
4	24806	Commutator End Head Assembly	1		24753	Insulating Bushing, term. stud.	1
		Includes:			24742	Terminal Stud	1
	24807	Brush, grounded	2		24751	Ins. Washer, term. stud, Inner	1
	24808	Felt	1		24817	Ins. Washer, term. stud, Outer	1
	24809	Brush Spring Set	1		24749	Plain Washer, term. stud	1
5	24810	Bearing Plate Assembly, Intermediate	1	11	24818	Cover Band	1
6	24811	Pinion Housing Assembly	1	12	24814	Oil Seal	1
		Includes:		13	24819	Gasket, for intermediate bearing	1
	24812	Bronze Bearing	1	14	24821	Screw, Intermediate bearing	4
	24813	Bearing Cap	1	15	24822	Screw, Pinion housing, hexagon head ...	4
	24814	Oil Seal	1	16	24823	Thrust Washer Package*	1

* Contains additional parts to service other applications.

Order parts from your nearest KID Dealer or Distributor

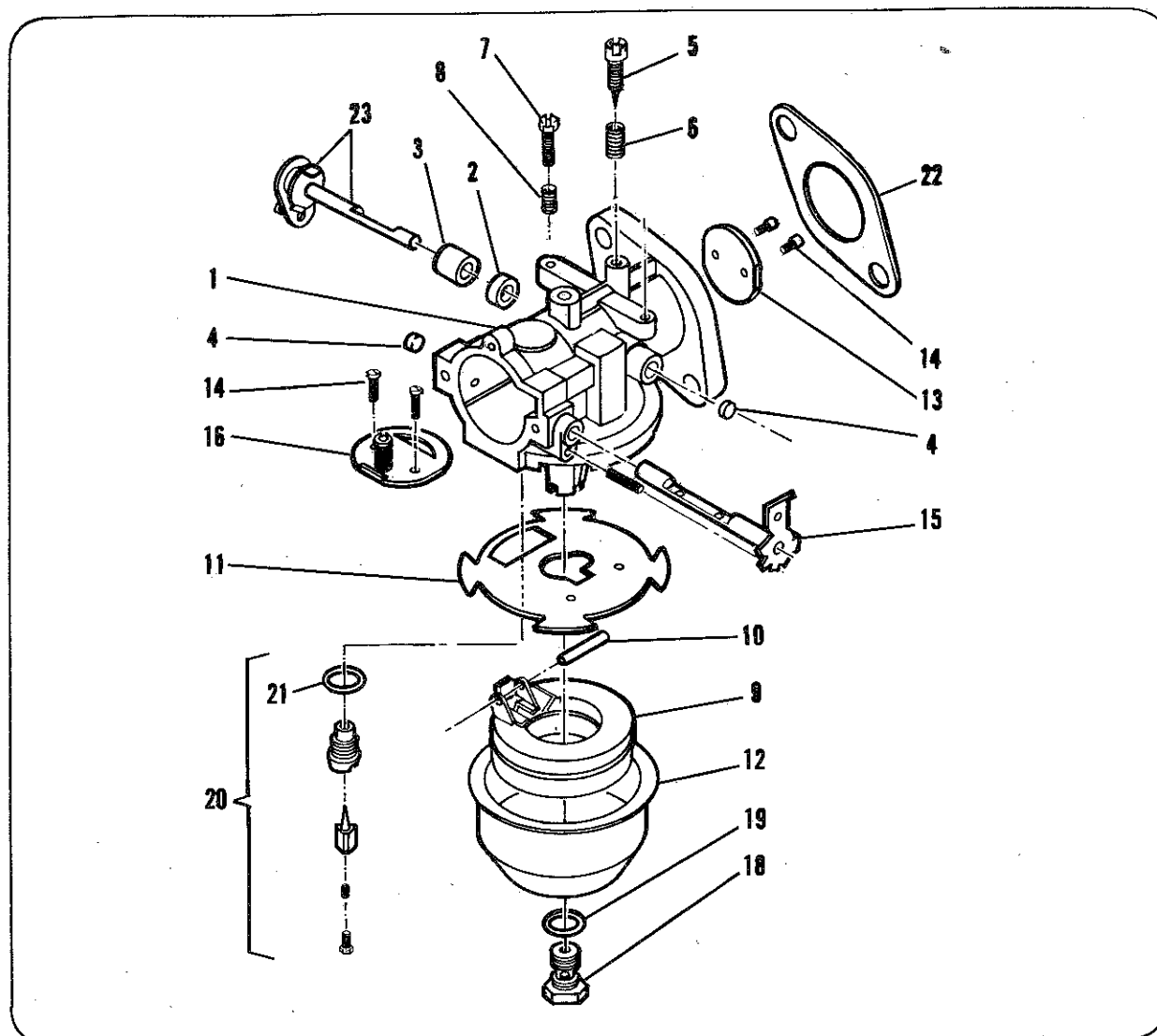


FIGURE II-19 CARBURETOR ASSEMBLY PART NO. 24556

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	24824	Throttle Body	1	12	24835	Fuel Bowl	1
2	24825	Seal, Throttle Shaft	1	13	24836	Plate, Throttle	1
3	24826	Retainer, Throttle Shaft Seal	1	14	24837	Screw, Throttle and Choke Plate	4
4	24827	Cup Plugs	2	15	24838	Lever and Shaft Assembly, Choke	1
5	24828	Needle, Idle Adjustment	1	16	24839	Plate Assembly, Choke	1
6	24829	Spring, Idle Adjustment	1	18	24841	Main Jet	1
7	24830	Screw, Throttle Stop	1	19	24842	Washer, Main Jet	1
8	24831	Spring, Throttle Stop Screw	1	20	24843	Fuel Valve and Seat Assembly	1
9	24832	Float and Hinge Assembly	1	21	24844	Gasket, Fuel Valve Seat	1
10	24833	Axle, Float	1	22	24555	Flange Gasket	1
11	24834	Gasket, Bowl to Body	1	23	24845	Throttle Shaft and Lever Assembly	1

Order parts from your nearest KID Dealer or Distributor

*TRANSMISSIONS

The hydrostatic transmissions are identical except for output shaft direction. Each transmission consists of a variable displacement piston pump driving a variable displacement piston type hydraulic motor. The pump and motor are connected by means of a ported valve plate. A vane type replenishing pump keeps a constant fluid pressure on the other assemblies.

Major components of the transmission are: the housing, drive shaft, rotating group, swash plate, valve plate, and a yoke. The yoke governs the angle of the swash plate and consequently controls the stroke length of each piston. The

output shaft is attached to the drive sprocket that turns the triple-strand chain.

The transmissions provide complete control throughout an unlimited range of operations and eliminate the necessity for different engine speeds. Therefore, the engine is governed to a nearly constant speed. By means of the swash plate and yoke, constant input can be varied to any desired output. This eliminates the need for a clutch, brake, or reduction gears, and provides full control through one control lever.

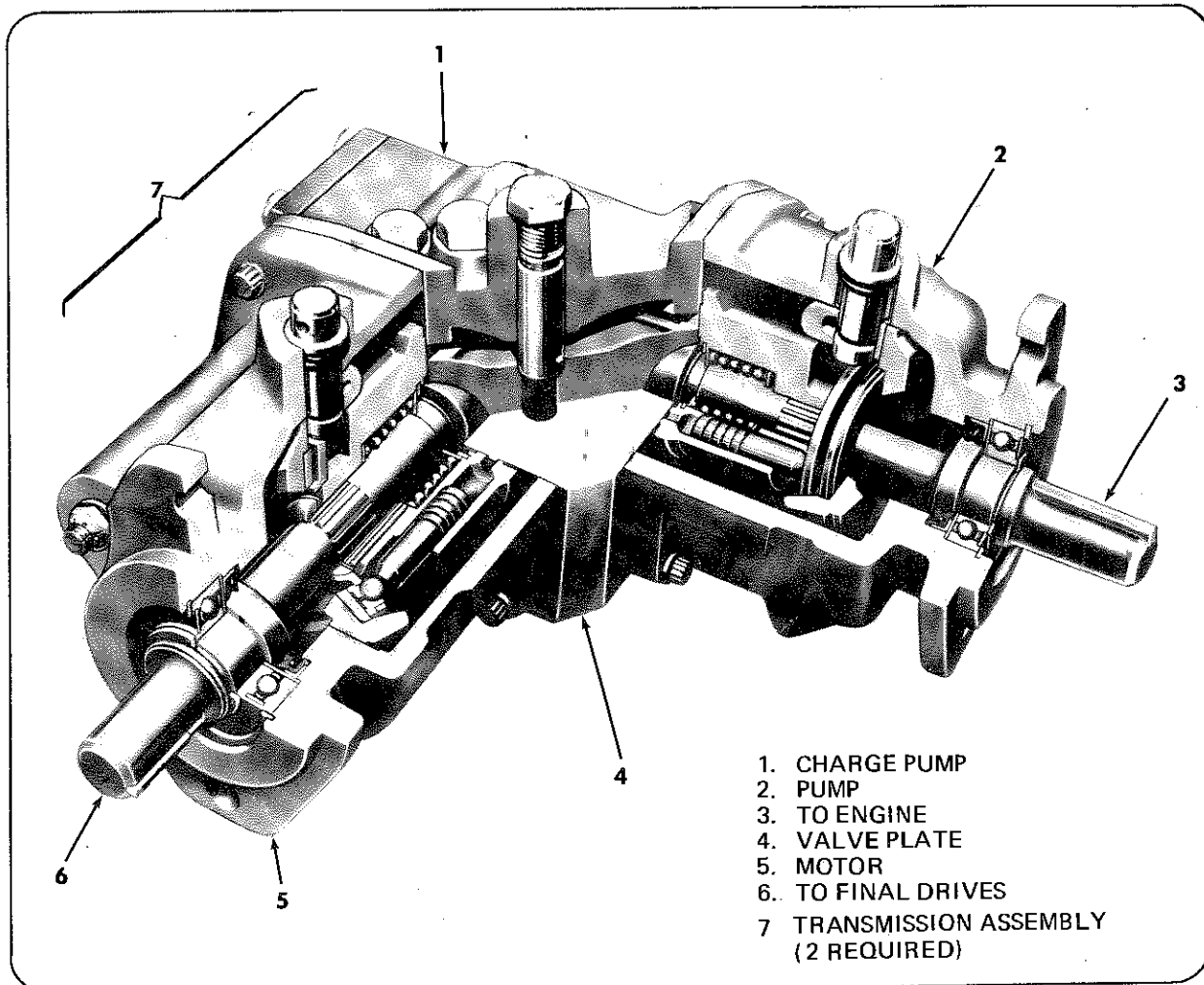


FIGURE II-20 VICKERS MODEL 1515Y HYDROSTATIC TRANSMISSION PART NO. 21333

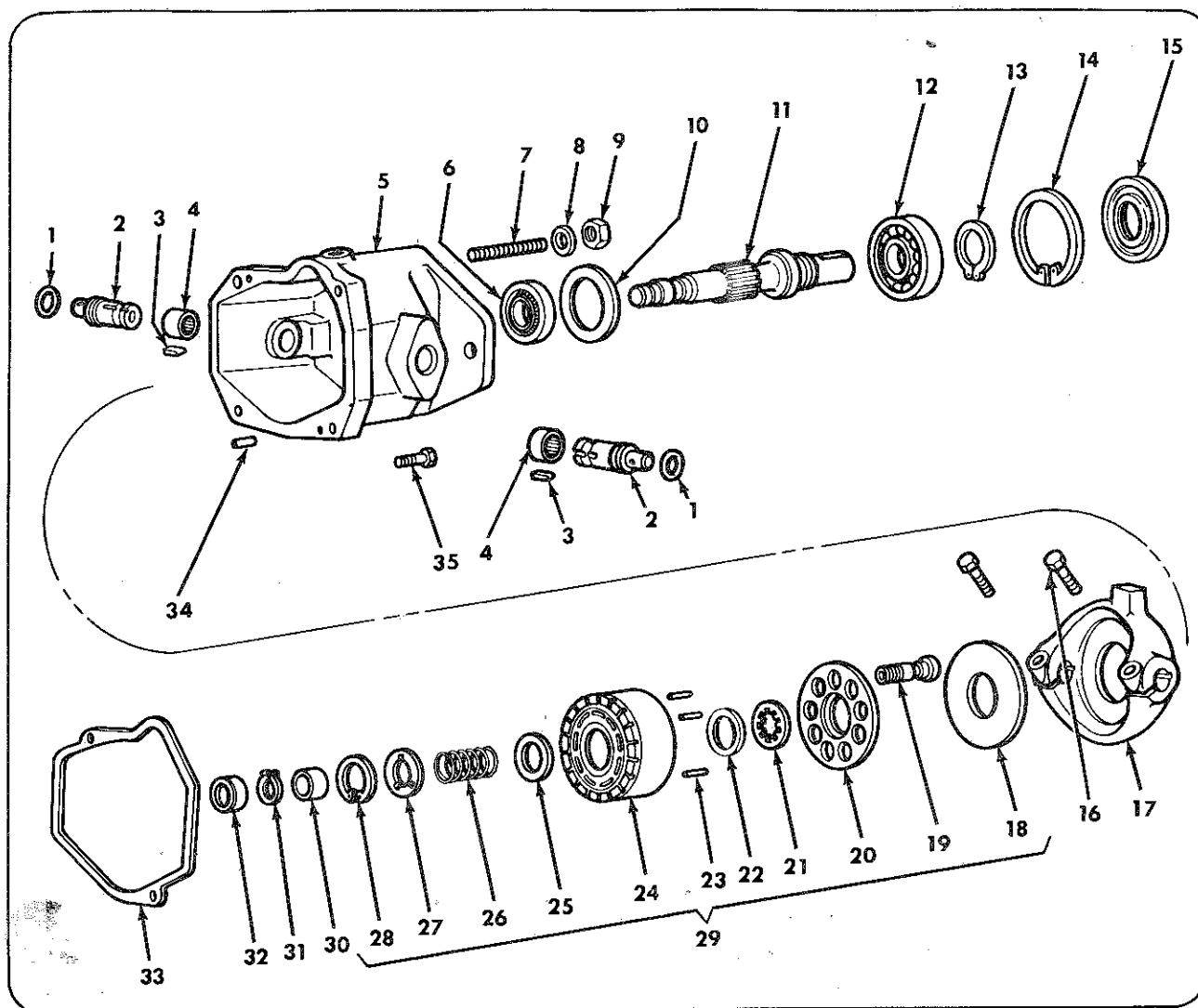


FIGURE II-21 MOTOR ASSEMBLY, TRANSMISSION

REF. NO.	PART NO.	DESCRIPTION	QTY.	REF. NO.	PART NO.	DESCRIPTION	QTY.
1	24015	"O" Ring, Pintle	2	19	24013	Piston Kit (Consists of 9 piston & Shoe Subassemblies)	1
2	24065	Pintle	2	20	24034	Shoe Plate	1
3	24066	Key, Pintle	2	21	24031	Washer, Spherical	1
4	24004	Bearing, Needle, Pintle	2	22	24030	Washer, Pin	1
5	24047	Housing, Motor	1	23	24026	Pin, Spring	3
6	24062	Seal, Shaft	1	24	24057	Block, Cylinder	1
7	24054	Screw, Adjusting	1	25	24023	Washer, Thrust	1
8	24032	Washer, Adjusting Screw	1	26	24025	Spring	1
9	24060	Nut, Adjusting Screw	1	27	24024	Washer, Lift Limiter	1
10	24033	Spacer, Motor Bearing	1	28	24007	Snap Ring, Cylinder Block	1
11	24072	Shaft, Motor	1	29	24171	Kit, Motor Rotating Group (Consists of: Ref. No's. 18 through 28)	1
12	24063	Bearing, Motor Shaft	1	30	24039	Bearing, Sleeve	1
13	24008	Snap Ring, Motor Shaft	1	31	24049	Snap Ring, Sleeve Bearing	1
14	24010	Snap Ring, Motor Shaft Bearing	1	32	24020	Bearing, Needle	1
15	24064	Seal, Motor Housing	1	33	24042	Gasket, Motor Housing	1
16	24001	Screw, Yoke	2	34	24016	Pin, Dowel	2
17	24056	Yoke	1	35	24059	Bolt	4
18	24061	Swash Plate	1				

Order Parts from your Nearest KID Dealer or Distributor

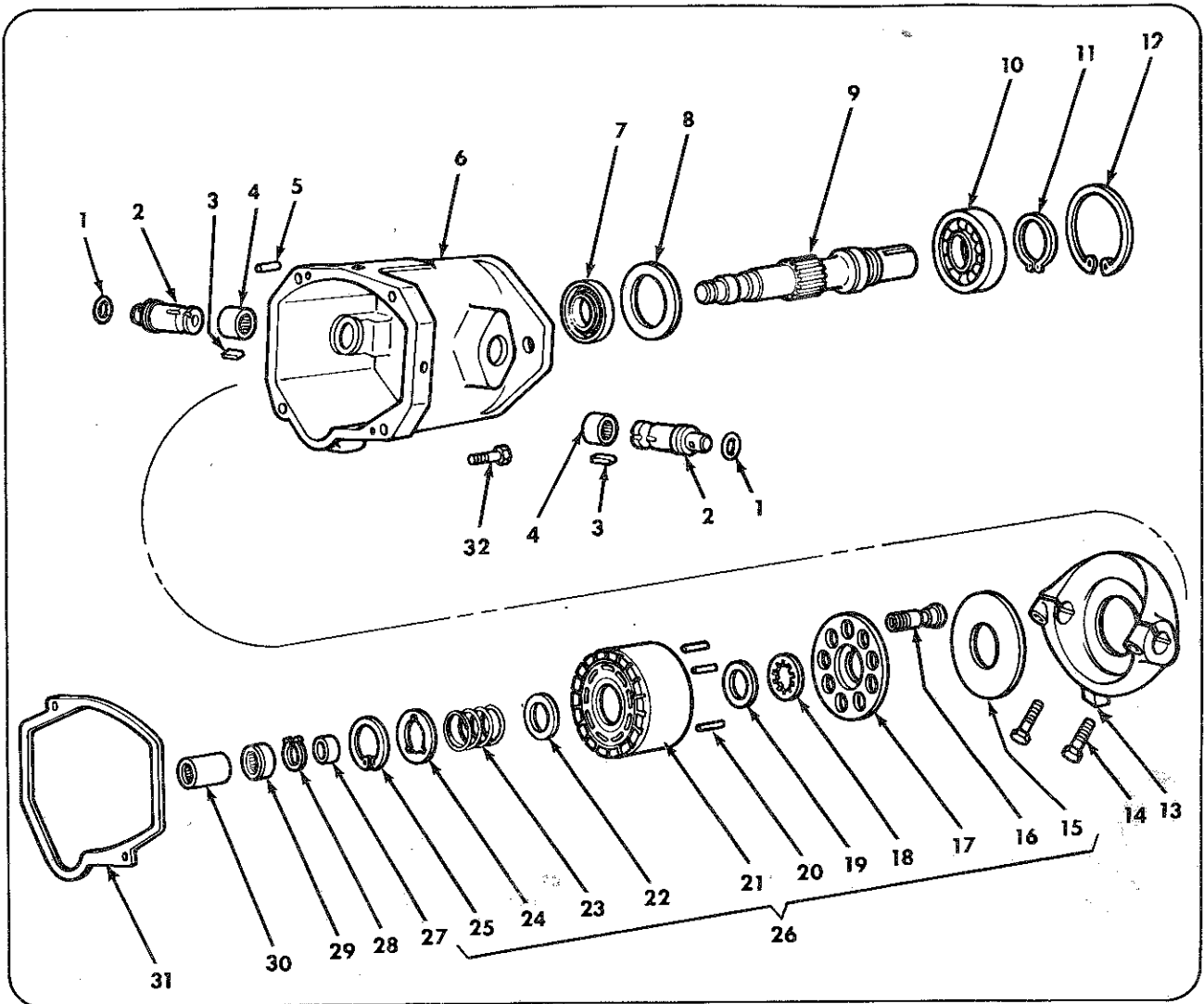


FIGURE II-22 PUMP ASSEMBLY, TRANSMISSION

REF NO.	PART NO.	DESCRIPTION	QTY.	REF NO.	PART NO.	DESCRIPTION	QTY.
1	24015	"O" Ring, Pintle	2	17	24034	Shoe Plate	1
2	24065	Pintle	2	18	24031	Washer, Spherical	1
3	24066	Key, Pintle	2	19	24030	Washer, Pin	1
4	24004	Bearing, Needle, Pintle	2	20	24026	Pin, Spring	3
5	24016	Pin, Dowel	2	21	24029	Block, Cylinder, Pump	1
6	24048	Housing, Pump	1	22	24023	Washer, Thrust	1
7	24062	Seal, Shaft	1	23	24025	Spring	1
8	24150	Spacer, Pump Bearing	1	24	24024	Washer, Lift Limiter	1
9	24071	Shaft, Pump	1	25	24007	Snap Ring, Cyl. Block	1
10	24058	Bearing, Pump Shaft	1	26	24170	Kit, Pump Rotating Group (Consists of Ref. No's. 15 through 25)	1
11	24008	Snap Ring, Pump Shaft	1	27	24039	Bearing, Sleeve	1
12	24009	Snap Ring, Pump Bearing	1	28	24049	Snap Ring	1
13	24056	Yoke	1	29	24020	Bearing, Needle	1
14	24001	Screw	2	30	24051	Coupling, Sleeve	1
15	24061	Swash Plate	1	31	24042	Gasket, Pump Housing	1
16	24005	Piston Kit (Consists of 9 Piston and Shoe Subassemblies)	1	32	24059	Bolt	4

Order parts from your nearest KID Dealer or Distributor

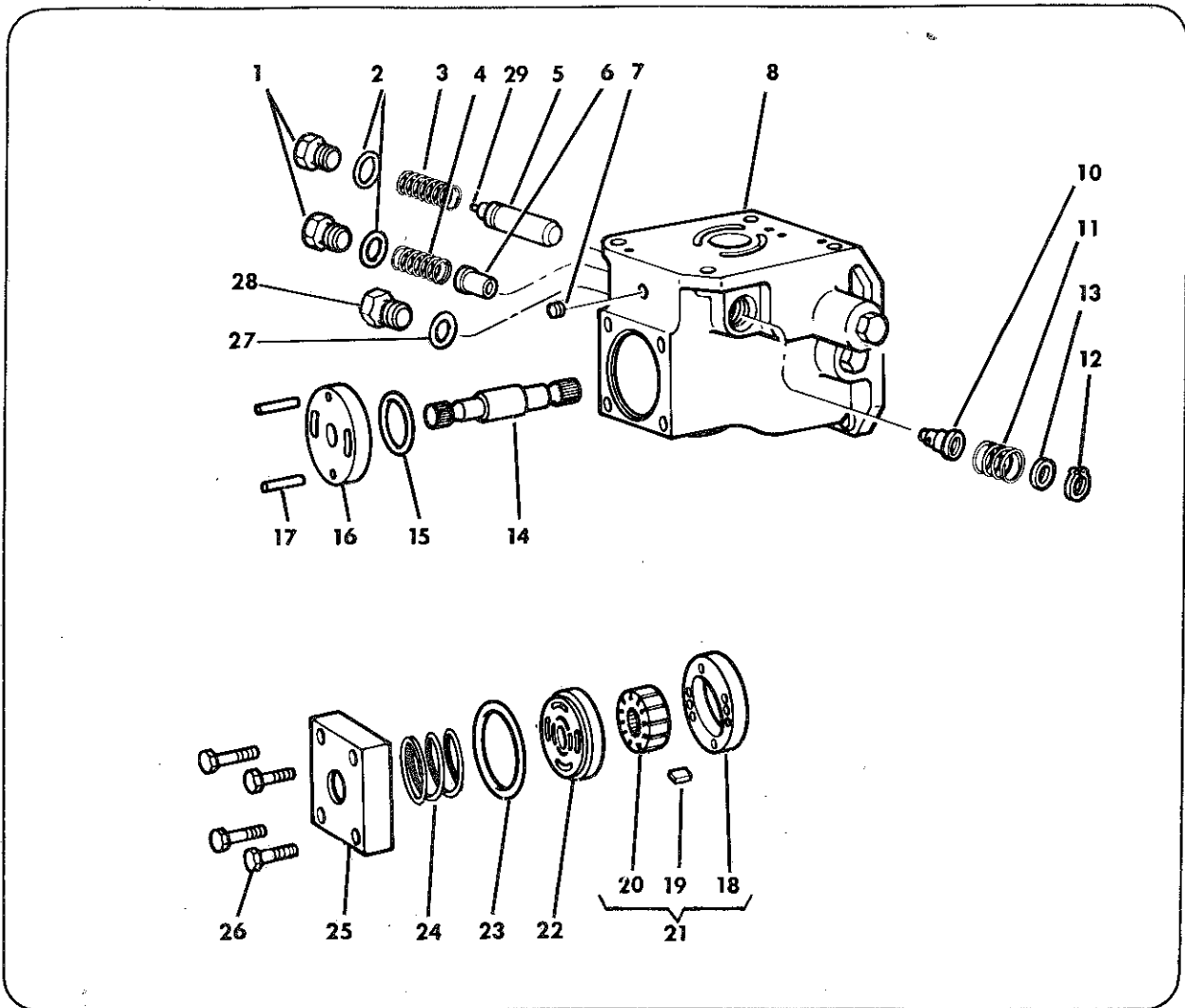


FIGURE II-23 CHARGE PUMP ASSEMBLY, TRANSMISSION

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	24041	Plug, Relief Valve	3	16	24046	Valve Plate	1
2	24012	"O" Ring, Relief Valve Plug	3	17	24002	Pin	2
3	24075	Spring	2	18	24040	Ring	1
4	24053	Spring, Poppet Valve	1	19	24011	Vane Kit (Consists of 10 vanes)	1
5	24067	Relief - Replenishing Valve	2	20	24019	Rotor	1
6	24044	Seat, Poppet Valve	1	21	24070	Cartridge Kit, Auxiliary Pump (Consists of Ref. No's. 18, 19 and 20) ..	1
7	24003	Plug, Pipe	1	22	24035	Pressure Plate	1
8	24068	Valve Block Assy. Kit	1	23	24028	"O" Ring, Pressure Plate	1
10	24043	Valve, Poppet	1	24	24037	Spring	1
11	24052	Spring, Poppet Valve	1	25	24045	Cover, Vane Pump	1
12	24006	Snap Ring, Poppet Valve	1	26	24018	Screw, Cover	4
13	24038	Washer, Poppet Valve	1	27	24014	"O" Ring	2
14	24050	Shaft, Extension	1	28	24017	Plug	2
15	24036	"O" Ring	1	29	24074	Pin, Relief Valve	2

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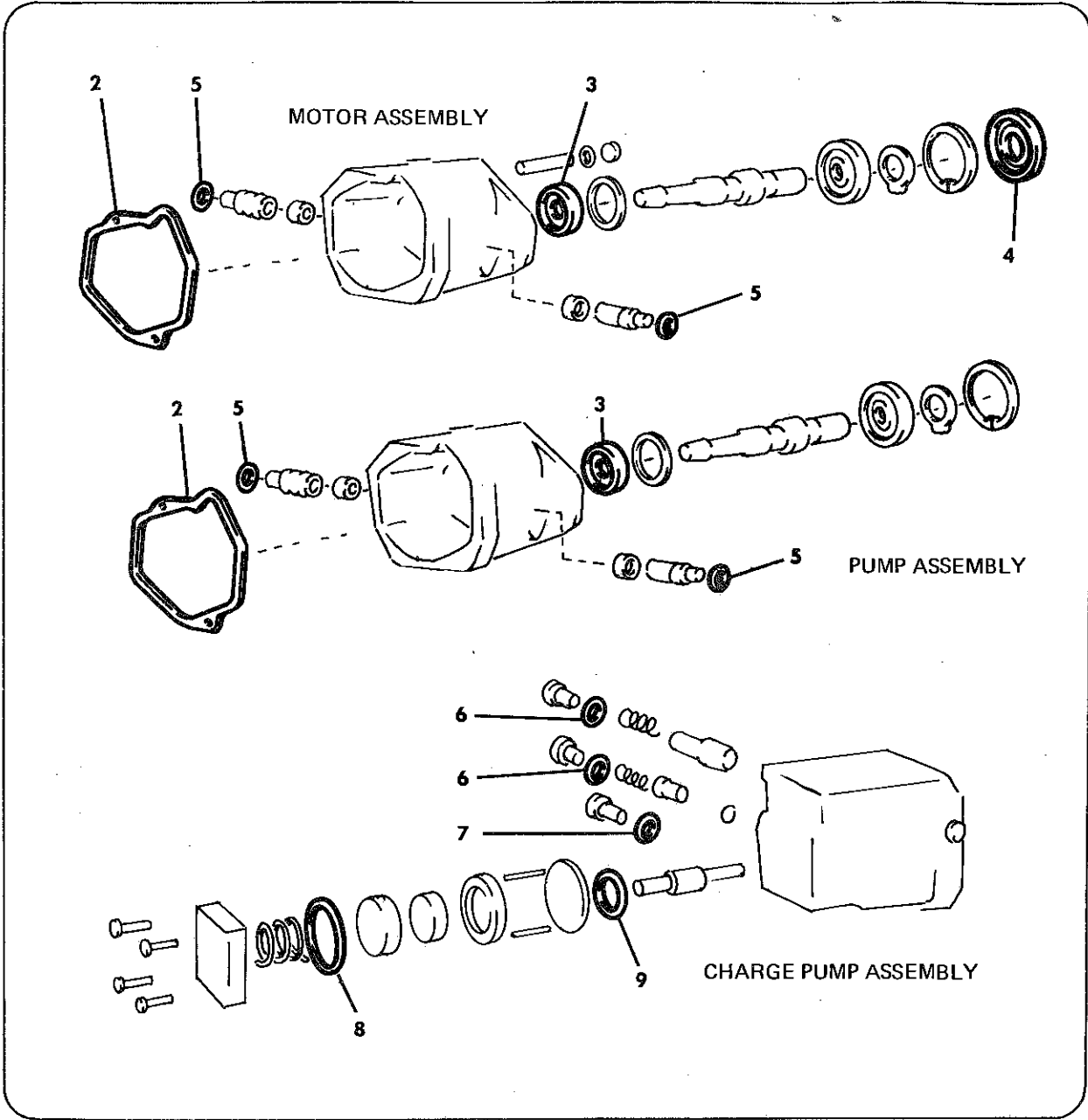


FIGURE II-24 GASKET AND SEAL KIT, TRANSMISSION

REF NO.	PART NO.	DESCRIPTION	QTY
1	24069	Seal Kit	1
2	24042	Gasket	2
3	24062	Oil Seal Shaft	2
4	24064	Seal, Plain	1
5	24015	"O" Ring	4

REF NO.	PART NO.	DESCRIPTION	QTY
6	24012	"O" Ring	3
7	24014	"O" Ring	2
8	24028	"O" Ring	1
9	24036	"O" Ring	1

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*GEARBOX

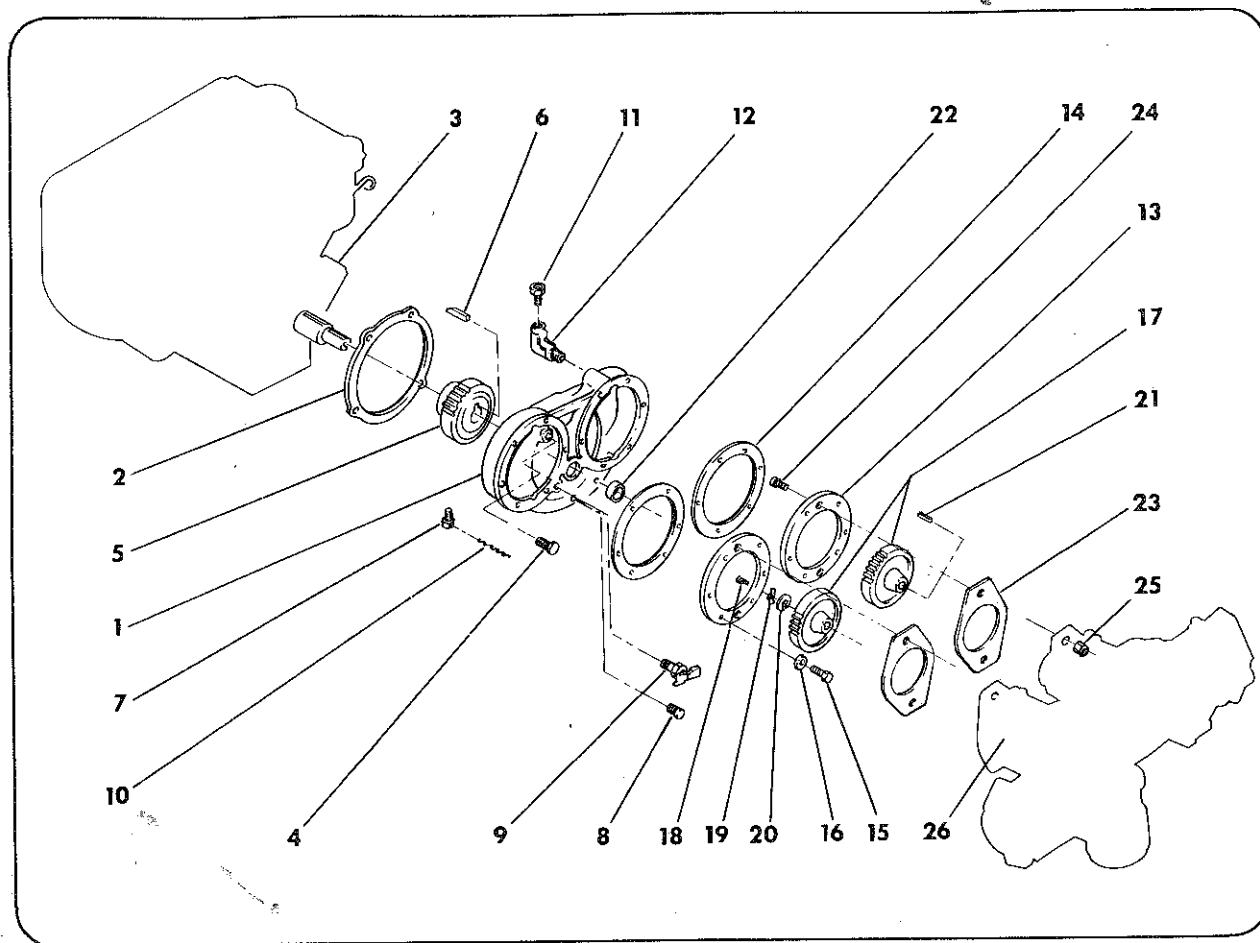
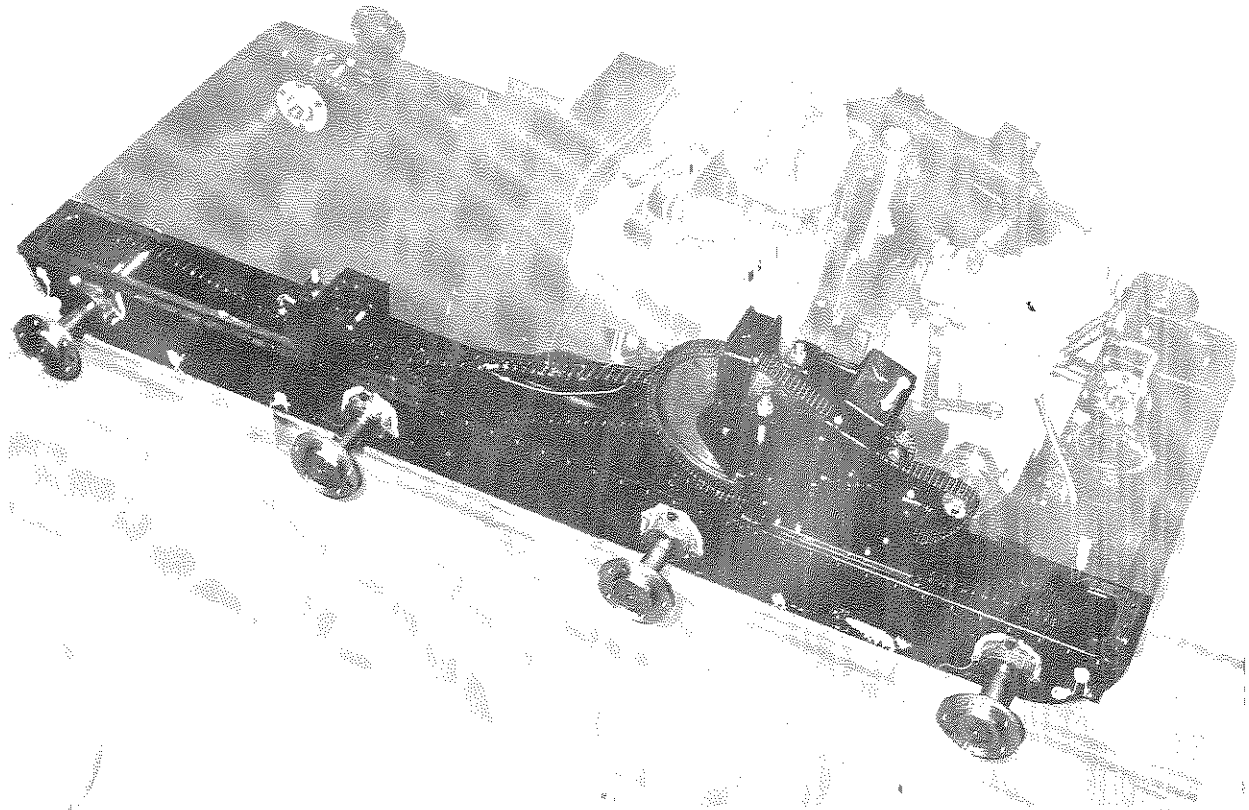


FIGURE II-25 - GEARBOX GROUP

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	22298	Housing, Gearbox	1	14	21322	Gasket, Sub-Plate	2
2	21351	Gasket, Gearbox to Engine	1	15	22331	Screw	12
3	21316	Wisconsin Engine (Ref. only, See Figure II-1)		16	21537	Lockwasher	12
4	22411	Lockbolt, Grade 8	4	17	21357	Gear, Transmission	2
5	21147	Gear, Engine	1	18	21129	Screw	2
6	21391	Key, Engine Gear	1	19	21142	Retainer, Screw	2
7	21528	Setscrew, Engine Gear	1	20	21141	Washer, Retaining	2
8	22332	Plug, Drain	1	21	22316	Key, Transmission Gear	2
9	22454	Drain, Cock	1	22	21350	Seal, Shaft	1
10	21514	Lockwire, 20 gauge	AR	23	21352	Gasket, Transmission	2
11	21193	Air Vent	1	24	22596	Screw	4
12	22333-1	Elbow	1	25	22412	Locknut	4
13	21318	Sub-Plate	2	26	21333	Vickers Transmissions (Ref. only, See Figure II-20)	

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SECTION III RUNNING GEAR



The running gear transmits torque from the transmission output shafts to the wheels by means of two symmetrical chain drive systems.

The sprockets on the transmission output shafts drive large jackshaft sprockets by means of triple strand chains.

On each side, two small sprockets attached to the large jackshaft sprocket drive sprockets on No. 2 and No. 4 axles, which in turn drive No. 1 and No. 3 axle sprockets respectively.

Tension is maintained on the triple-strand chain (No. 1) by an idler sprocket and main drive chain tensioner. Tension

on No. 2 and No. 4 chains is set by raising or lowering the jackshaft assembly. Tension is maintained on No. 3 and No. 5 chains by idler sprockets and tensioners.

The axles and wheels are driven directly by the axle shaft sprockets, and the axles rotate in two roller bearings. The outer bearing goes through the hull, which has a waterproof seal.

This system of chains and sprockets provides a rugged, efficient, practical drive for the KID, and allows a get-home capability in event of failure by using a combination of chains for movement.

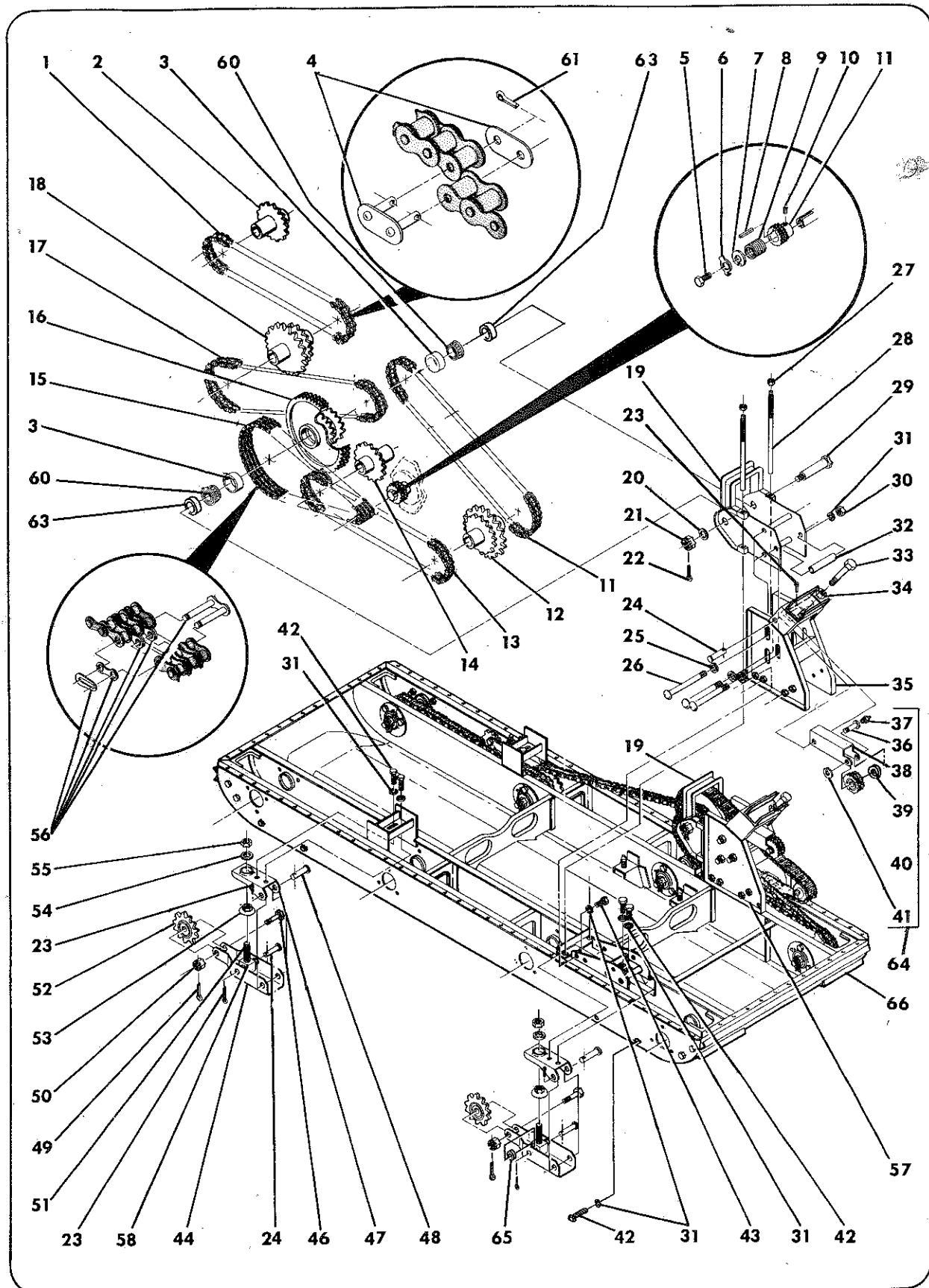
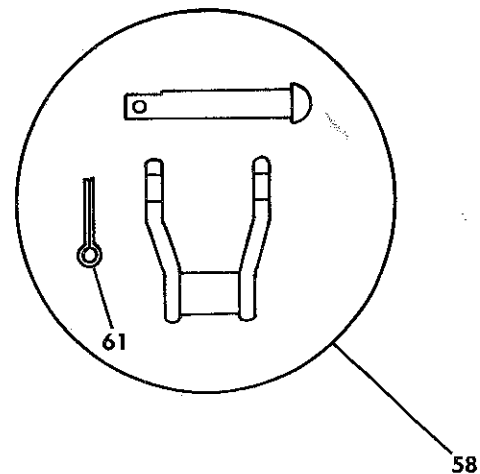
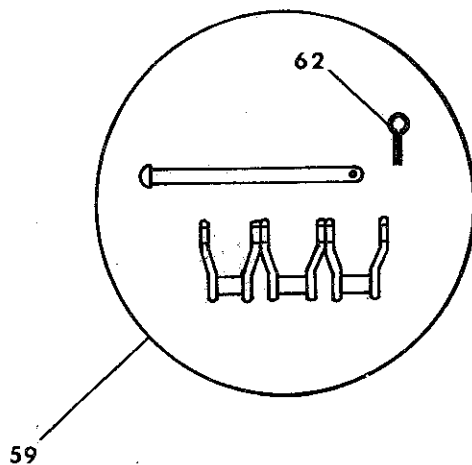


FIGURE III-1 CHAINS, SPROCKETS, JACKSHAFT AND CHAIN TENSIONERS

REF. NO.	PART NO.	DESCRIPTION	QTY.	REF. NO.	PART NO.	DESCRIPTION	QTY.
1	21324-2	Chain Assy	4	35	21783-2	Support Bracket,L. H.	1
2	21025	Sprocket Assy,Axle #1	2	36	21326	Pin, Idler Arm	2
3	24079	Bearing Cup.	4	37	21371	Grease Fitting	2
4	24180	Conn.Link,Master (Includes Ref.No.61)	8	38	21431	Idler Arm	2
5	21129	Screw,Hex	2	39	21392	Bearing	2
6	21142	Retainer,Bolt	2	40	21393	Sprocket	2
7	21141	Washer, Retainer	2	41	21563	Retaining Ring	2
8	22316	Key, Trans	2	42	21585	Screw	24
9	21191	Shim	8	43	21797	Screw	16
10	21515	Set Screw, Sprocket	2	44	21183	Idler Arm	4
11	22545	Sprocket, Trans.	2	46	21522	Screw	4
12	21028	Sprocket Assy, Axle #4	2	47	21793	Bracket, Chain Tensioner	4
13	21324-1	Chain Assy	2	48	21181-1	Pin	4
14	21027	Sprocket Assy, Axle #3	2	49	21508	Cotter Pin	4
15	22397-2	Drive Chain Assy	2	50	21521	Nut, Hex, Slotted	4
16	21032	Sprocket Assy, Main Drive	2	51	21179	Adjusting Screw	4
17	21324-3	Chain Assy	2	52	21385	Sprocket, Idler	4
18	21026	Sprocket Assy, Axle #2	2	53	22263	Nut, Spherical	4
19	21784	Adjusting Brkt.	2	54	22455	Washer, Flat	4
20	22261	Washer, Flat	2	55	21512	Nut	4
21	21594	Nut Hex, Slotted	2	56	24181	Conn. Link, Master	2
22	21194	Cotter Pin	2	57	21783-1	Support Bracket,R. H.	1
23	21553	Cotter Pin	10	58	24182	Link, Offsets (For 21324 Chain)	AR
24	21181	Pin	6	59	24183	Link, Offsets (For 22397 Chain)	AR
25	21599	Lockwasher	6	60	24076	Bearing Cone	4
26	21796	Bolt, Carriage	6	61	21569	Pin, Cotter	16
27	21980	Nut, Hex	4			(For 21324 Chain)	
28	21789	Screw, Adjusting	4	62	21541	Pin, Cotter	4
29	21397	Bolt	2			(For 22397 Chain)	4
30	21540	Nut, Hex	6	63	22260	Spacer	4
31	21537	Lockwasher	30	64	22326	Idler Arm Assembly (Consists of Ref. Nos. 36, 37, 38, 39, 40, 41)	2
32	21788	Spacer	6	65	21180	Spacer	8
33	21566	Screw	2	66	21010	Hull Assy., Lower (Ref. Only- See Fig.I-1)	
34	21564	Jam Nut	2				



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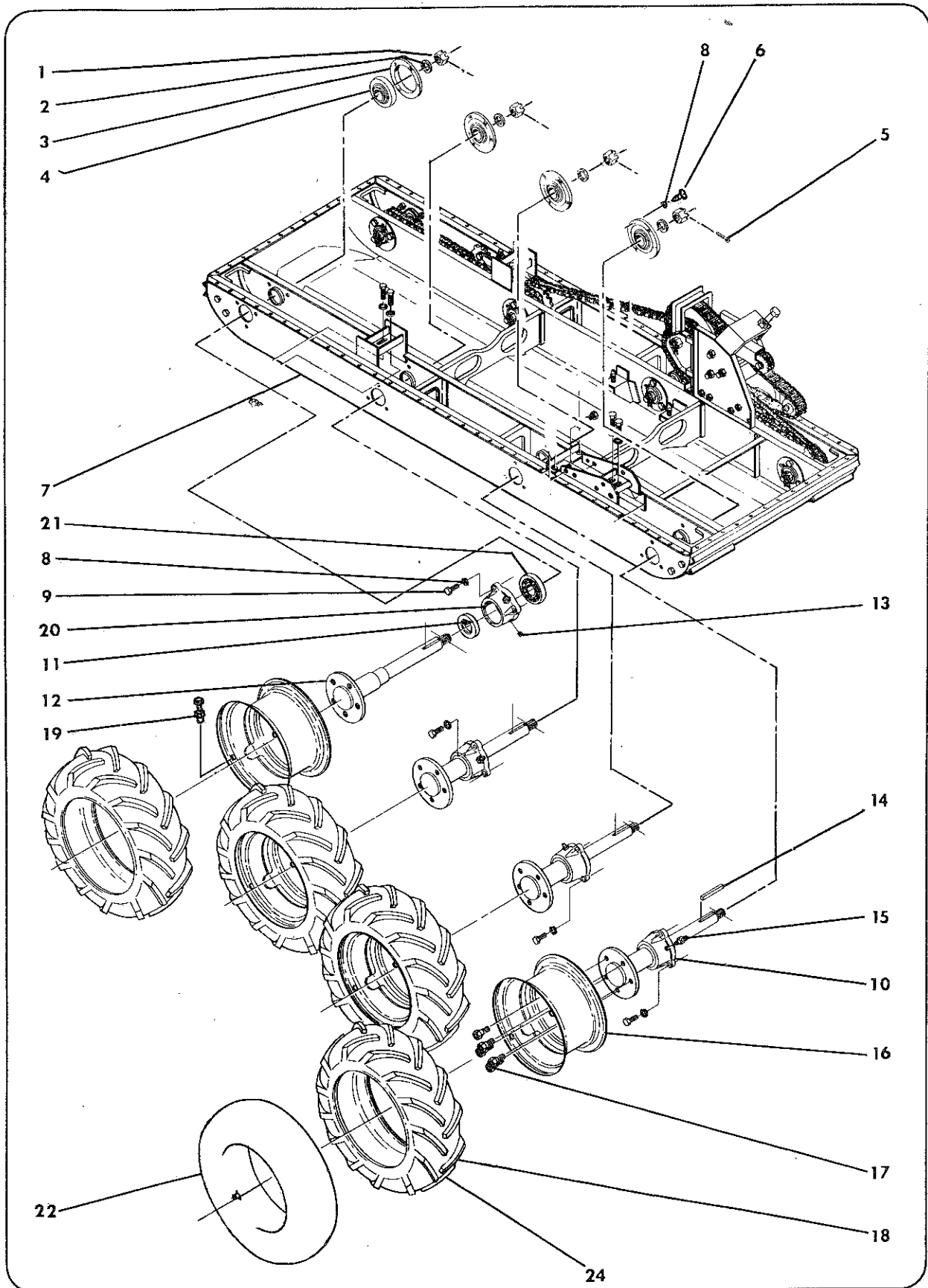


FIGURE III-2 - AXLES, BEARINGS AND WHEELS

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	21507	Nut, Hex, Slotted	8
2	22459	Washer, Thrust	8
3	21330	Flange, Bearing, Inner	8
4	21331	Bearing, Axle, Inner	8
5	21508	Cotter Pin	8
6	21539	Screw, Bearing Ret	24
7	21010	Hull Assy Lower (Ref. only - See Figure I-1)	
8	21537	Lockwasher	48
9	22329	Screw, Hex	24
10	21197	Bearing Assy Axle (Consists of No. 11 13 15 20 and 21)	8
11	21196	Grease Seal, Axle Bearing	8
12	22589	Axle	8
13	21430	Plug	8
14	22593	Key	8
15	22243-1	Fitting, Grease	8
16	21367	Wheel	8
17	21509	Wheel Bolt	40
18	21377	Tire (2 Ply)	8
19	21799	Valve Stem	8
20	21232	Housing, Outer Bearing	8
21	21331-	Bearing, Axle, Outer	8
22	21447	Tube, Inner (Optional)	8
23	21376	Valve Cap	8
24	21753	Tire (4 Ply) (Optional)	8

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SECTION IV SYSTEMS

Section IV is an Illustrated Parts List of the four major KID systems. This IPL identifies all the parts in each system, illustrates their relationship in the system, and also includes all the interconnecting hardware.

The first subsection is on Drive Controls -- the controls necessary to drive the KID. This includes the transmission controls, throttle control and choke control. The transmission controls consist of lever arms in fixed relationship on the transmissions, and push-pull controls connected between the control console and the carburetor. The second subsection is the Hydraulic System. This system is a closed-loop hydraulic system that supplies clean, temperature-controlled hydraulic fluid to the transmissions and implement circuit (if installed). The system consists basically of a reservoir, a filter, the transmissions themselves, an oil cooler, and necessary piping. External to the transmissions, the system is very simple consisting only of the hardware necessary for oil transfer. All oil metering, directional flow, pressure and sequencing is accomplished internally by the transmissions.

The third subsection is the Electrical System. This system provides 12V DC for ignition, lighting and accessories (optional). This subsection illustrates and identifies the battery and mounting, fuse, quick disconnects, and the wires, with their routing through the KID.

The fourth subsection is the Fuel System. This system draws fuel from the fuel tank and transfers it under pressure to the carburetor. The system consists of a fuel tank with filler neck and mounting; an electric fuel pump with integral fuel filter, and the required tubing and fittings. Information on the carburetor will be found in the Engine Section.

* CONTROLS

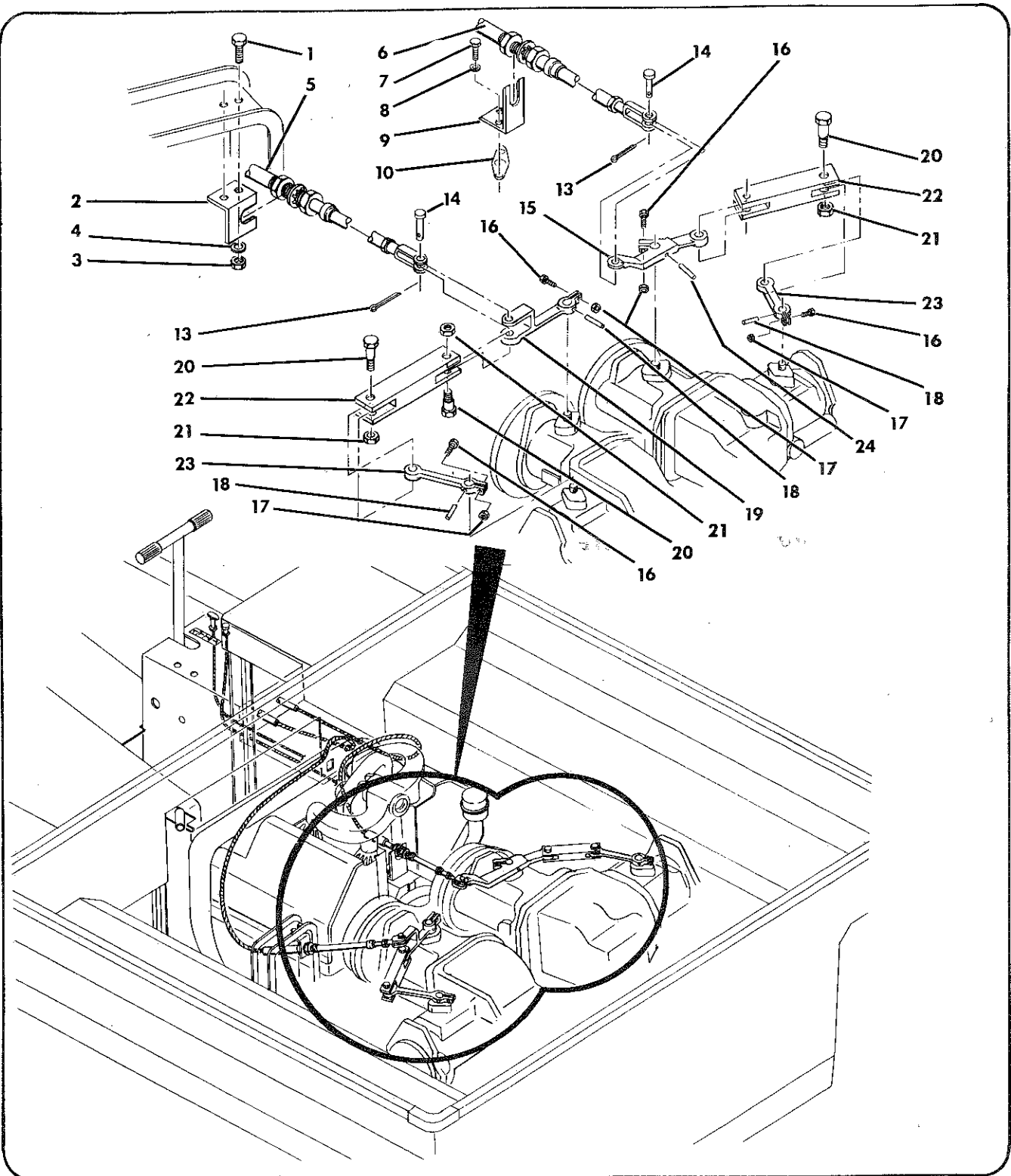


FIGURE IV - 1 - DRIVE CONTROL SYSTEM

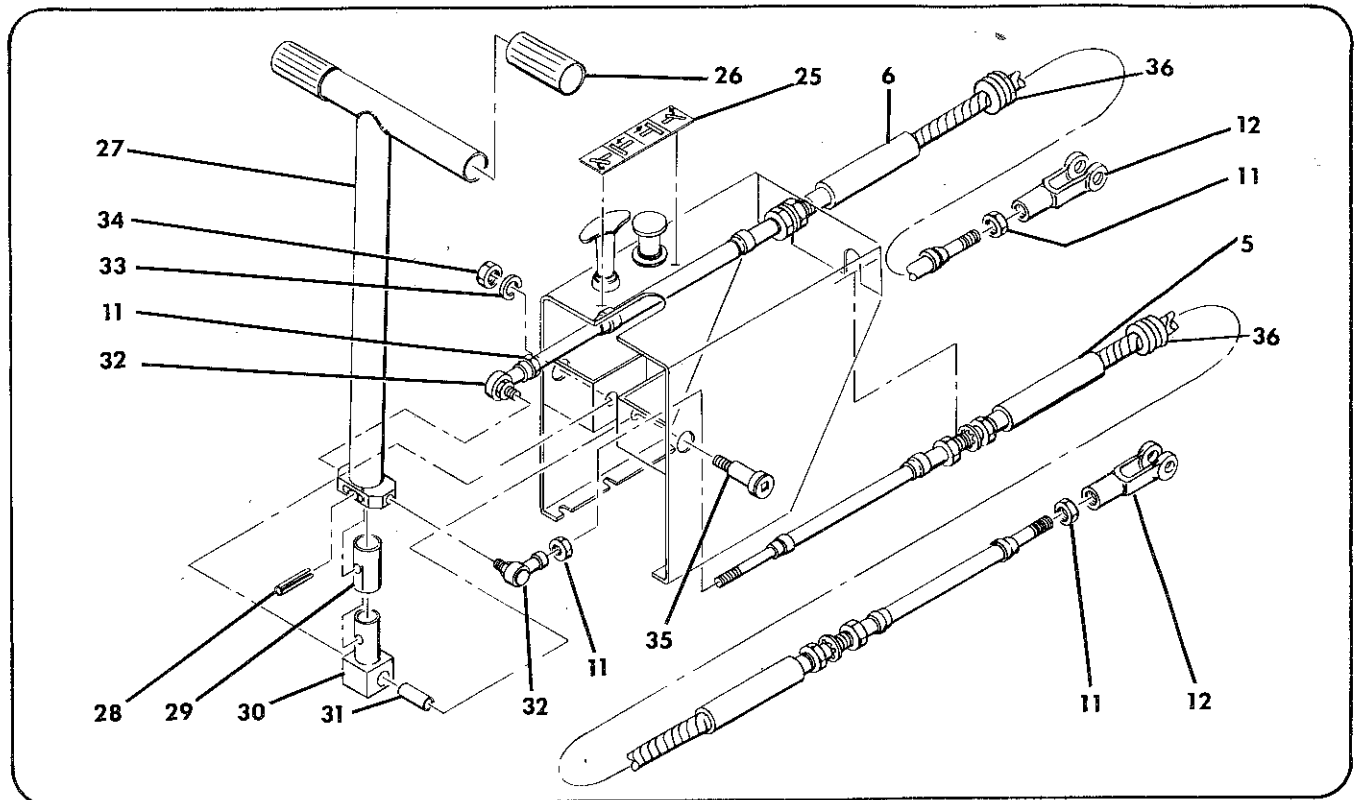


FIGURE IV -1 - DRIVE CONTROL SYSTEM (Cont.)

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	21575	Screw	2	19	22395	Bellcrank, L/H	1
2	22269	Mtg. Bracket	1	20	22522	Screw, Shoulder	4
3	21572	Nut	2	21	21598-6	Locknut	4
4	21573	Lockwasher	2	22	22400	Link	2
5	21359-1	Control Cable, L/H	1	23	22399	Arm	2
6	21359-2	Control Cable, R/H	1	24	22416	Roll Pin	1
7	21524	Screw (Ref. only - See Figure II-2)		25	22422	Decal, Steering	1
8	21573	Lockwasher (Ref. only - See Figure II-2)		26	22551	Handle Grips	2
9	22557	Bracket, Cable	1	27	22305	Lever Assy, Steering	1
10	24507	Gasket (Ref only - See Figure II-2)		28	21561	Roll Pin	1
11	21555	Nut	4	29	21368	Bushing	1
12	21360	Clevis	2	30	21365	Block, Pivot	1
13	21554	Cotter Pin	2	31	21435	Bushing, Pivot	1
14	21361	Clevis Pin	2	32	21363	Rod End	2
15	22398	Bellcrank, R/H	1	33	21537	Lockwasher	1
16	21587	Screw	4	34	21540	Nut	1
17	21598-5	Locknut	4	35	21502	Screw, Shoulder	1
18	21562	Roll Pin	3	36	22341-3	Grommet, Split	2

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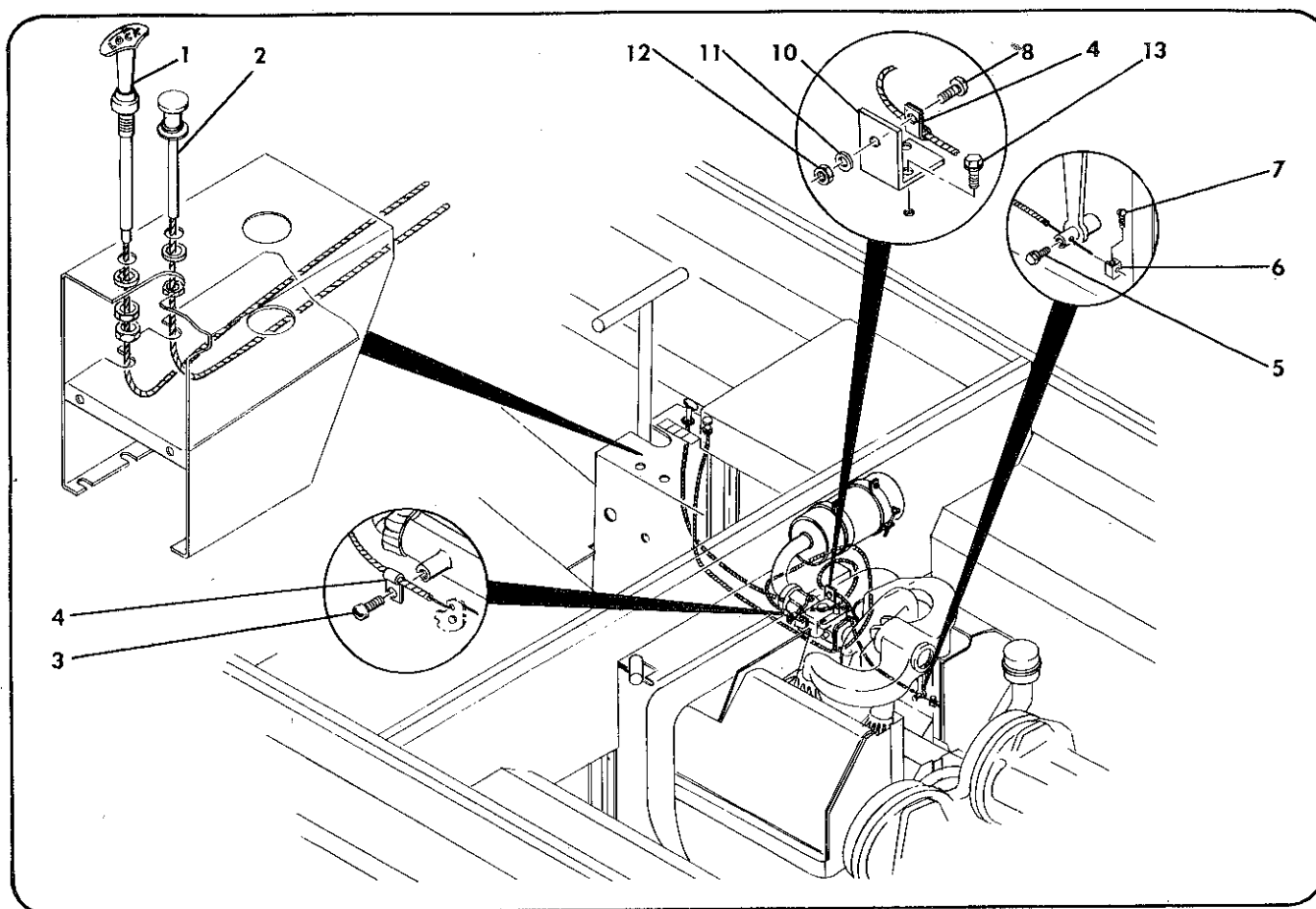


FIGURE IV-2 - THROTTLE AND CHOKE CONTROLS

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	21455	Control, Throttle Assy	1	7	24713	Screw (See Figure II-12)	1
2	22408	Choke Cable Assy	1	8	22110	Screw	1
3	24562	Screw (See Figure II-1)	1	10	22451	Bracket, Throttle	1
4	22467	Clamp (See Figure II-1)	2	11	21591	Lockwasher	1
5	24709	Screw (See Figure II-12)	1	12	21590	Nut	1
6	24712	Block, Stop (See Figure II-12)	1	13	22468	Screw	2

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* HYDRAULICS

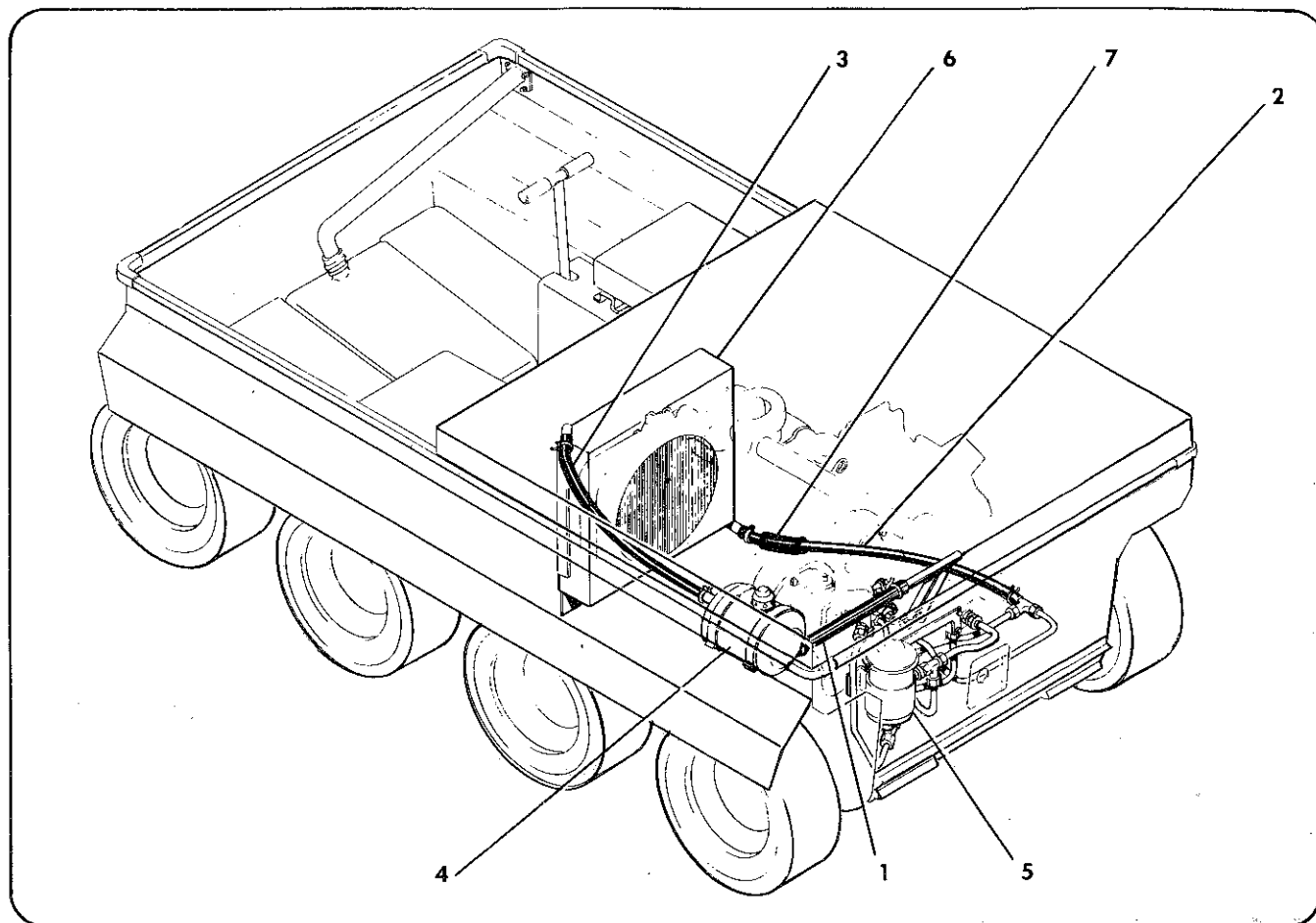


FIGURE IV-3 - KID TRACTOR HYDRAULIC SYSTEM INSTALLATION *

1	21249	Hose Res. Outlet (Make from 24400 - 18")
2	22471	Hose to Cooler (Make from 24400-30")
3	21149	Hose Res. Inlet (Make from 24400-34")
4	22473	Reservoir
5	21313	Oil Filter Assy
6	21308	Shroud Cooler Mt
7	22472	Hose Protector (Make from 24400-4")

*** EXPLODED COMPONENTS SHOWN IN FIGURE IV-4**

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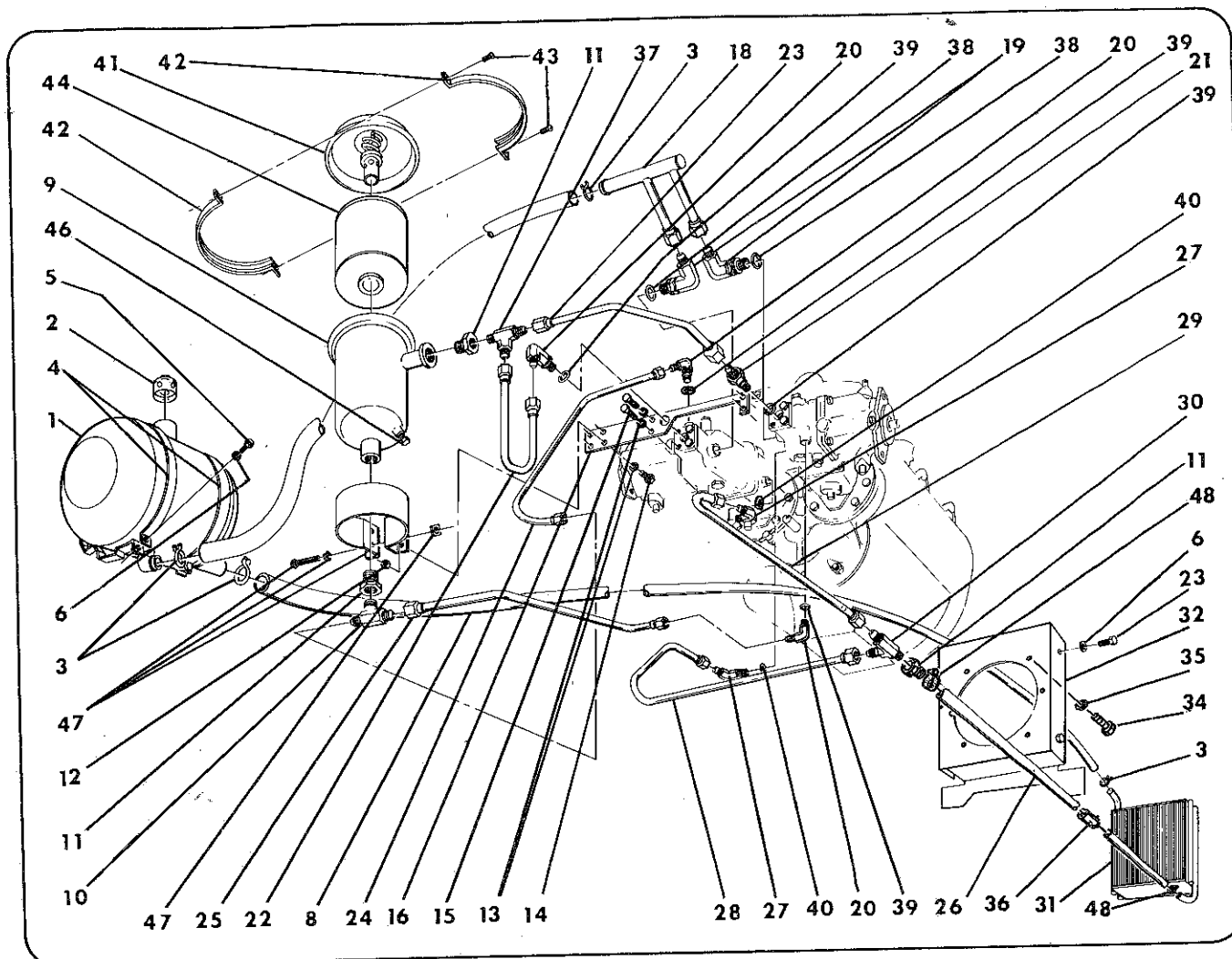


FIGURE IV-4 - HYDRAULIC SYSTEM COMPONENTS

REF NO.	PART NO.	DESCRIPTION	QTY.
1	22473	Reservoir (Includes Ref. No. 2)	1
2	24398	Cap, Oil Res.	1
3	21777	Clamps	4
4	21013	Cradle Assy (See Figure I-1)	
5	21575	Screw	2
6	21573	Lockwasher	6
7	21249	Hose, Res. Outlet	1
8	21149	Hose, Res. Inlet	1
9	24413	Case, Oil Filter	1
10	21248	Tee, Filter	1
11	21247	Bushing, Filter	3
12	21540	Nut	4
13	21537	Lockwasher	12
14	21539	Screw	4
15	24018	Bolt (See Figure II-23)	
16	22325	Bracket, Support	1
18	21406	Tube Assy	1
19	21487	Elbow	2
20	21485	Elbow	3
21	21246	Connector	1
22	22453	Tube Assy	1
23	21234	Tube Assy	1

REF NO.	PART NO.	DESCRIPTION	QTY.
24	22495	Tube Assy	1
25	22497	Tube Assy	1
26	22471	Hose, to Cooler	1
27	21486	Elbow	2
28	22463	Tube Assy	1
29	22465	Tube Assy	1
30	21245	Tee	1
31	21286	Trans. Oil Cooler	1
32	21308	Shroud, Oil Cooler Mt.	1
33	21524	Screw	4
34	21576	Screws (See Figure II-11)	6
35	21573	Lockwasher (See Figure II-11)	6
36	22472	Hose Protector	1
37	21244	Tee	1
38	24078	O Ring	2
39	24077	O Ring	4
40	24080	O Ring	2
41	24411	Cover - Spring Assy	1
42	24409	Clamp Ring Assy	2
43	21575	Screw	2
44	24410	Elem, Filter Assy	1
45	24412	Gasket	1
46	24414	Plug	1
47	24415	Bracket Assy	1
48	21477	Clamp, Hose Screw type	2

* ELECTRICAL

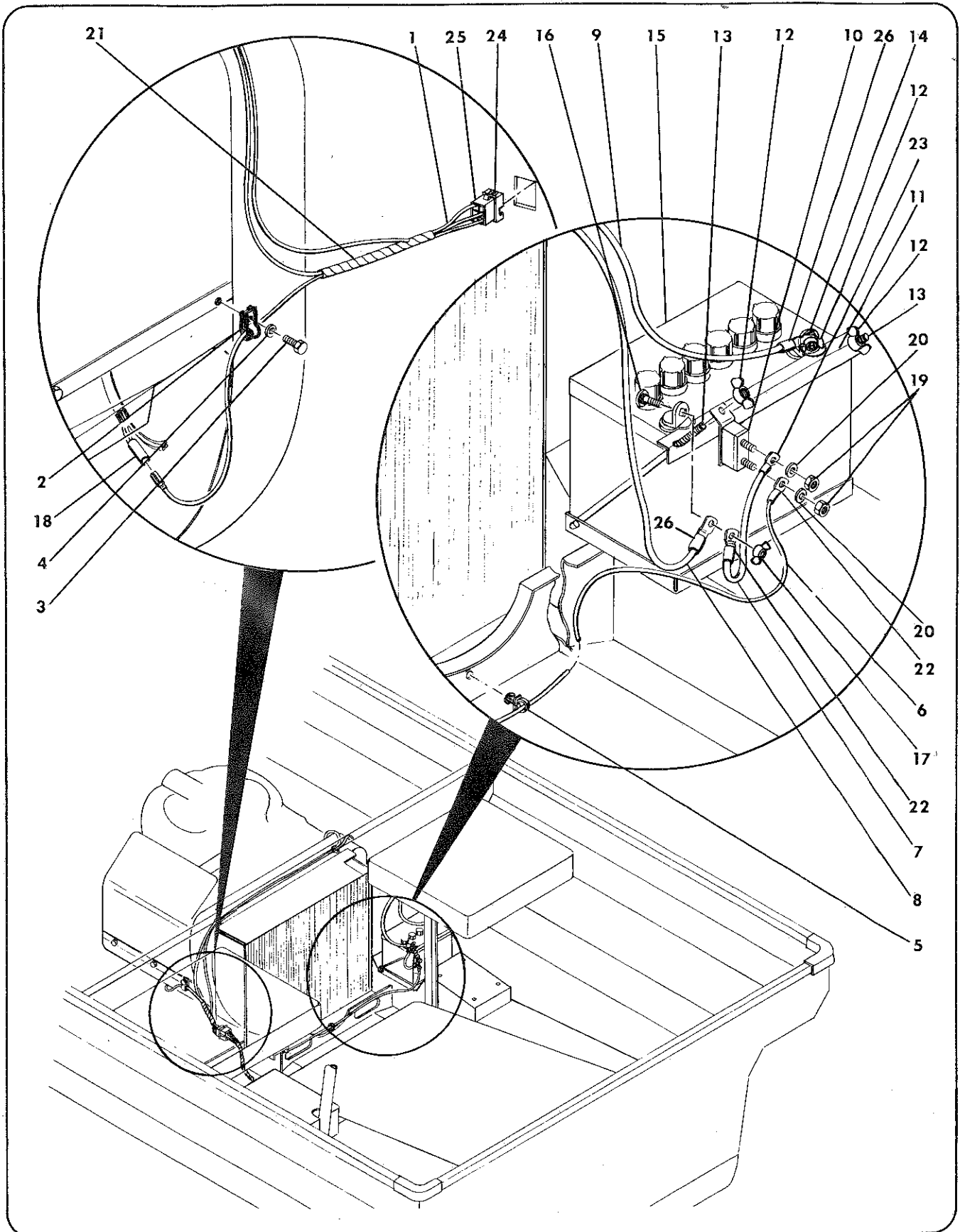


FIGURE IV-5 - ELECTRICAL SYSTEM - BATTERY AND BULKHEAD ROUTING

* ELECTRICAL

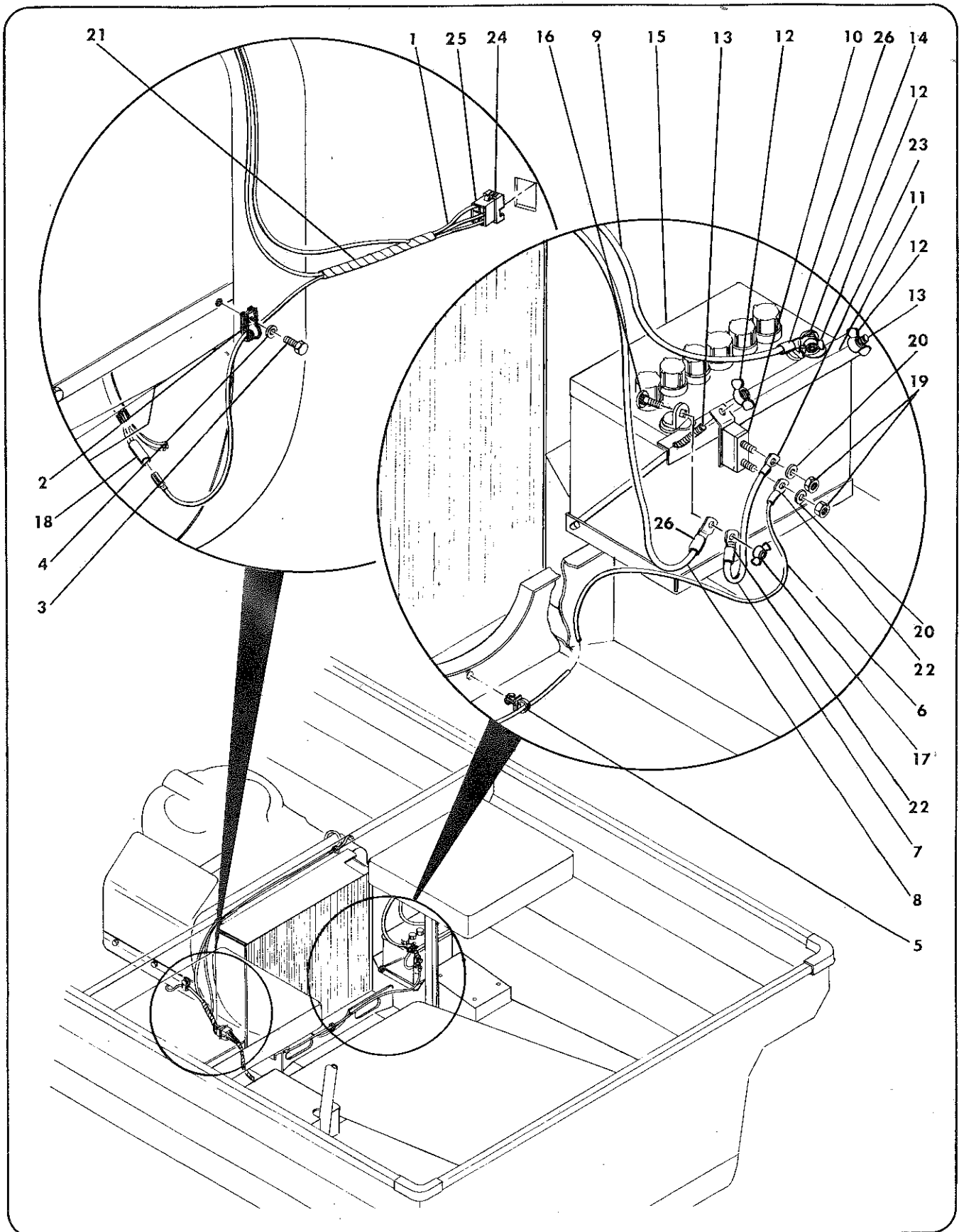


FIGURE IV-5 - ELECTRICAL SYSTEM - BATTERY AND BULKHEAD ROUTING

FIGURE IV-5

REF NO.	PART NO.	DESCRIPTION	QTY.	REF NO.	PART NO.	DESCRIPTION	QTY.
1	22338	Rear Harness Assy	1	12	21523	Wing Nut	3
2	22417	Clamp	1	13	21387	J-Bolt, Battery	2
3	21576	Screw (Ref. only - See Figure II-11)		14	21895	Bolt	1
4	21573	Lockwasher (Ref. only - See Figure II-11)		15	21315	Battery	1
5	22418	Clamp	1	16	21567	Bolt	1
6	22337	Harness (Ref. only - See Figure IV-6)		17	24416	Wing Nut	1
7	22575-1	Wire Assy	1	18	22394	Connector	1
8	22340	Battery to Ground Wire (Includes Ref. No. 26)	1	19	21532	Nut	2
9	22340	Battery to Starter Solenoid Wire (Includes Ref. No. 26)	1	20	21199	Lockwasher	2
10	22375	Reset Switch	1	21	22390	Tape, Electrical (66 ft. roll)	AR
11	21386	Strap, Battery, Angle	1	22	21608	Connector	1
				23	21605	Connector	2
				24	22371	Bayonet	3
				25	22370	Connector (Mates with 22369 - Figure IV-6)	1
				26	21610	Connector	4

BU

FIGURE IV-6

REF NO.	PART NO.	DESCRIPTION	QTY.	REF NO.	PART NO.	DESCRIPTION	QTY.
1	22338	Rear Harness Assy (Ref. only - See Figure IV-5)		17	21605	Connector	4
2	22354	Ignition Switch (Consists of Nut, Key and Lockwasher)	1	18	21604	Connector	1
3	22462	Starter Wire (Ref. Only - See Fig. II-16)		19	22390	Tape, Electrical (66 Ft. roll)	AR
4	22341-4	Grommet	2	20	24816	Terminal Stud Pkg. (Ref only - See Figure II-18)	
5	22418	Clamp	2	21	24743	Lockwasher, Cad. Pl. Ref. only - See Figure II-15)	
6	22337	Harness	1	22	24746	Nut, Cad. Pl. (Ref. only - See Figure II-15)	
7	21308	Shroud Oil Cooler Mt. (Ref. only - See Figure IV-4)		23	24744	Lockwasher, Cad. Pl. (Ref. only - See Figure II-15)	
8	22340	Battery to Ground Wire (Ref. only - See Figure IV-5)		24	24745	Nut, Cad. Pl. (Ref. only - See Figure II-15)	
9	22340	Battery to Starter Solenoid Wire (Ref. only - See Figure IV-5)		25	21537	Lockwasher (Ref. only - See Figure II-16)	
10	21423	Fuel Pump (Ref. only - See Figure IV-8)		26	21840	Screw (Ref. only - See Figure II-16)	
11	21613	Fuse Holder	1	27	24721	Ignition Coil Assy (Ref. only - See Figure II-13)	
12	22469	Fuse	1	28	21607	Connector	1
13	21611	Splice	1				
14	22369	Connector (Mates with 22370 - Figure IV-5)	1				
15	22371	Bayonet	3				

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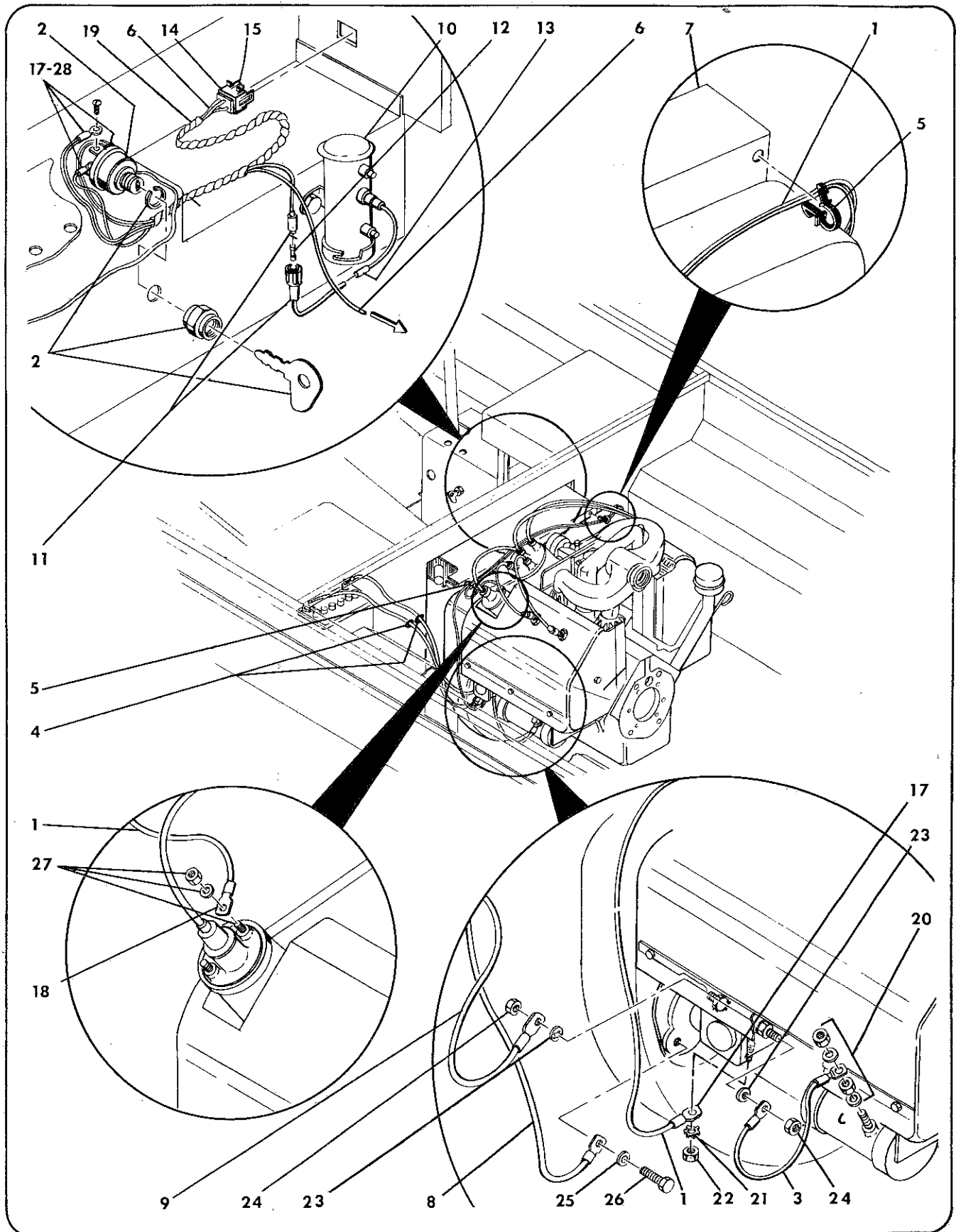


FIGURE IV-6 - ELECTRICAL SYSTEM - CONSOLE AND ENGINE

* FUEL

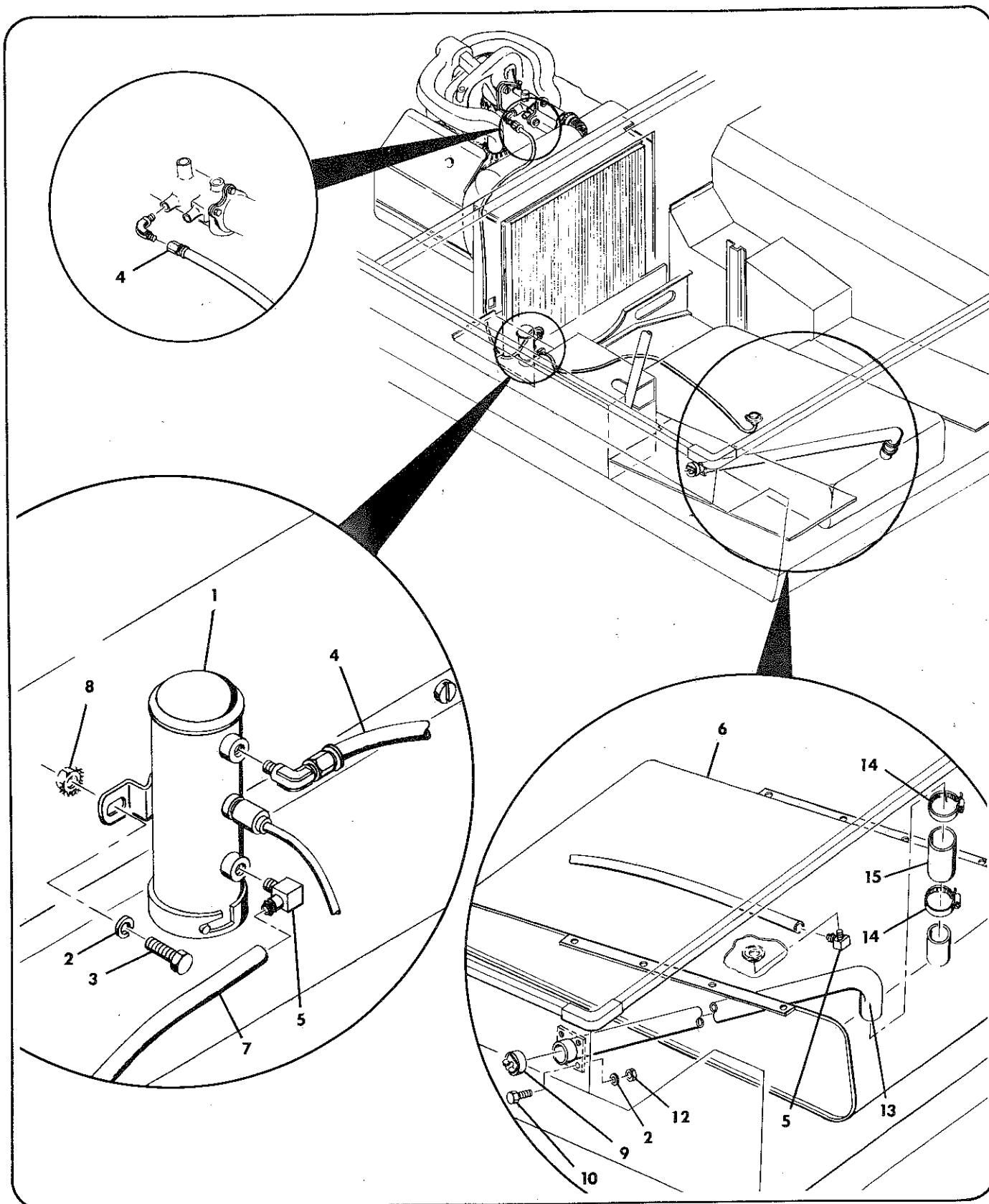


FIGURE IV-7 - FUEL SYSTEM

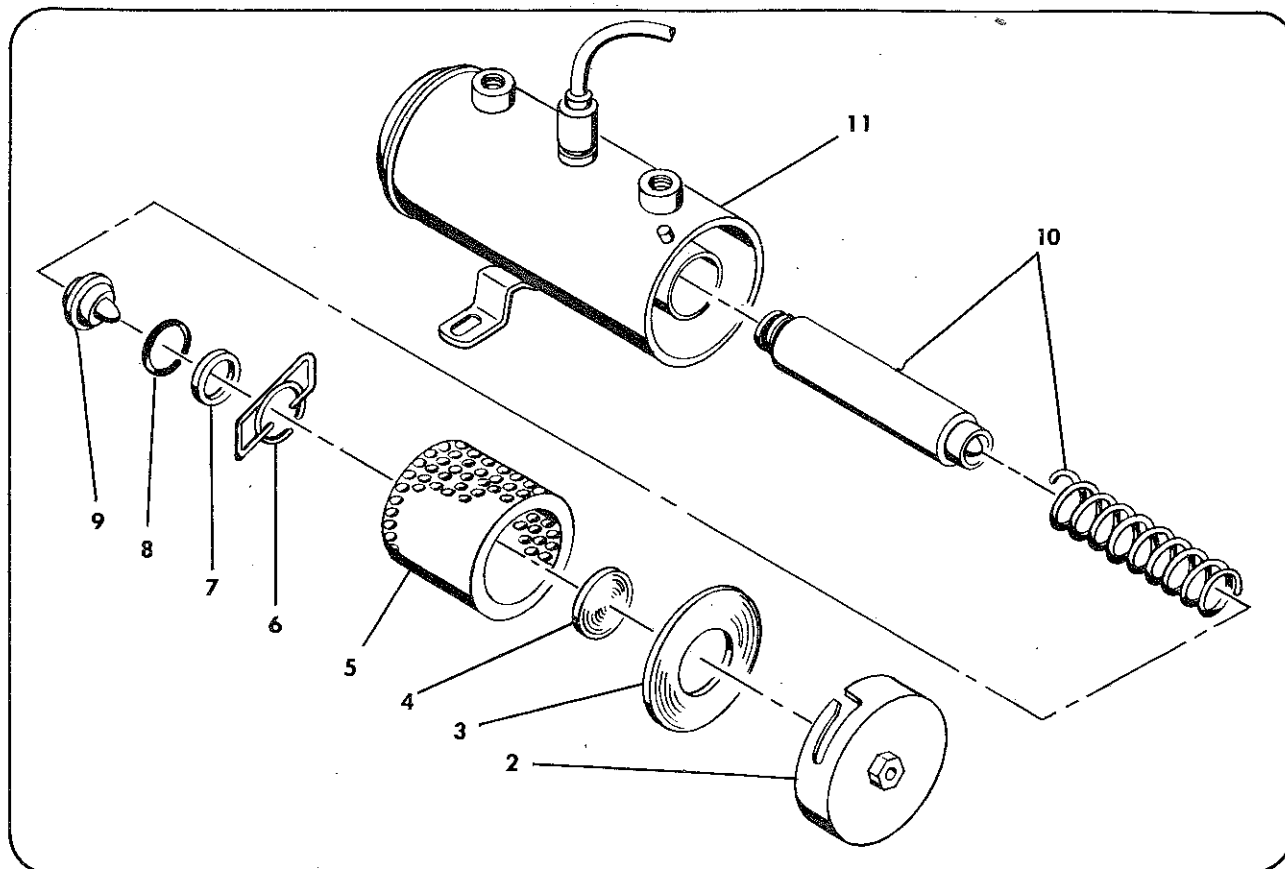


FIGURE IV -8 - FUEL PUMP ASSEMBLY (Reference No. 1)

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	21423	Fuel Pump (Ref. Only - See Figure IV-8)	1
2	21573	Lockwasher	6
3	21571	Screw	2
4	21623	Hose, Fuel Line	1
5	22334	Elbow	2
6	21346	Fuel Tank	1
7	22335	Hose, Fuel Line	1
8	21546	Weldnut (Ref. only)	
9	21453	Cap, Fuel Filler	1
10	21579	Screw	4
12	21572	Nut	4
13	21075	Pipe Assy - Fuel Filler	1
14	21223	Clamp, Hose	2
15	21222	Hose, Fuel Filler	1

REF. NO.	PART NO.	DESCRIPTION	QTY
1	21423	Fuel Pump	1
2	24417	Cover Assy	1
3	24418	Cover Gasket	1
4	24419	Magnet	1
5	24420	Filter	1
6	24421	Retainer Ring	1
7	24422	Washer	1
8	24423	O Ring	1
9	24424	Spring Cup Assy	1
10	24425	Plunger & Spring Kit	1
11	24426	Housing, Fuel Pump	1

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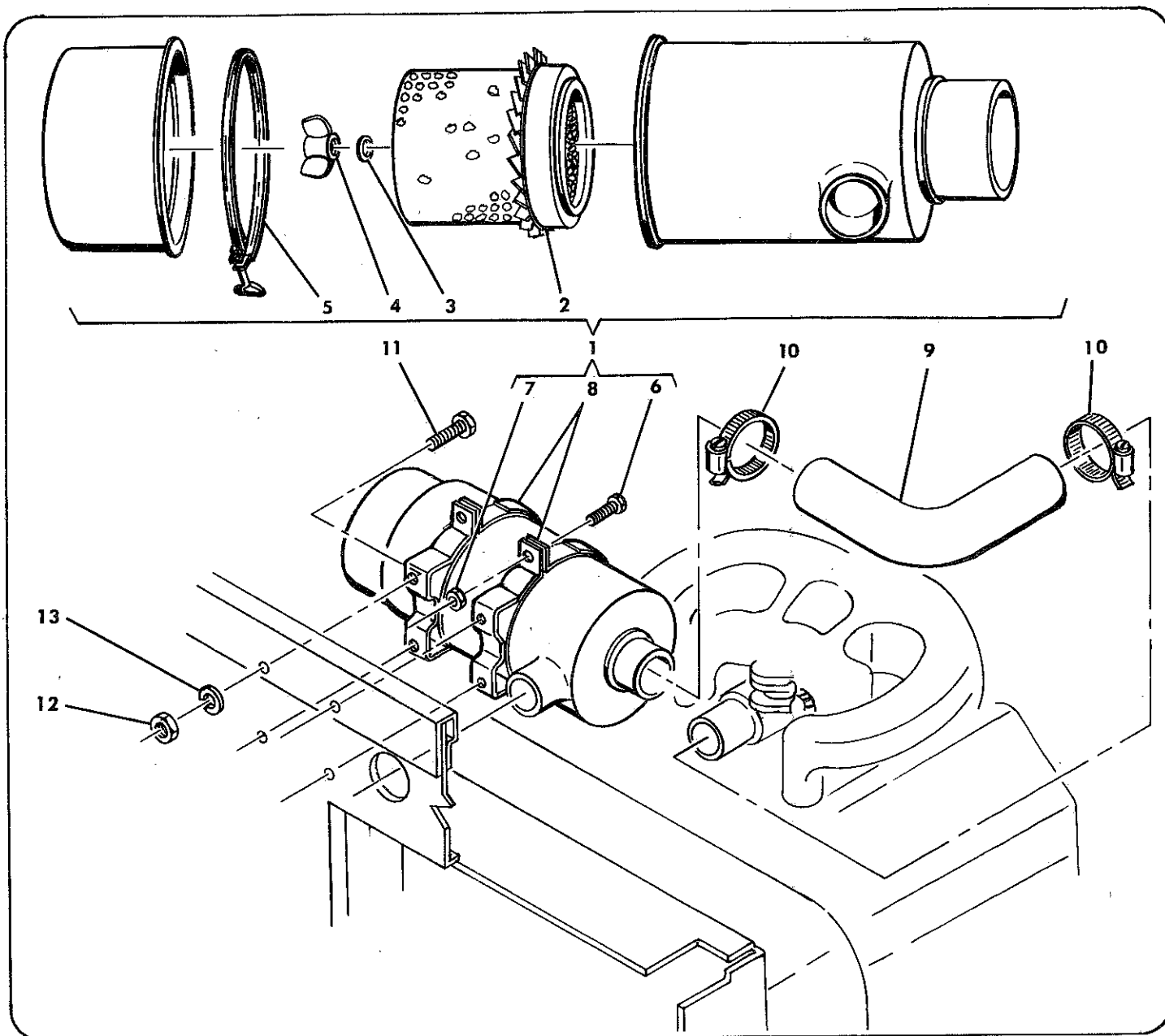


FIGURE IV-9 AIR CLEANER

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
1	21317	Air Cleaner Assy. (Consists of Ref. Nos. 2, 3, 4, 5, 6, 7, and 8)	1	7	21572	Nut	2
2	24399	Filter Air Cleaner	1	8	24430	Mounting Brackets	2
3	24427	Washer, Gasket	1	9	21389	Hose - Air Cleaner	1
4	24429	Wing Nut	1	10	21477	Clamp - Hose	2
5	24428	Clamp Assy	1	11	21570	Screw	4
6	22554	Screw	2	12	21543	Nut	4
				13	21544	Lockwasher	4

Order Parts from your Nearest KID Dealer or Distributor

HOW TO ORDER PARTS

When ordering parts, state Part Number, KID Serial Number, Part Name, and Quantity Required -- DO NOT ORDER BY REFERENCE NUMBER.

To assure continued successful and trouble-free operation of your KID, order all parts from your authorized KID dealer distributor.

DO NOT ACCEPT "WILL-FIT" PARTS. THEY MAY SHORTEN THE LIFE OF THE KID

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