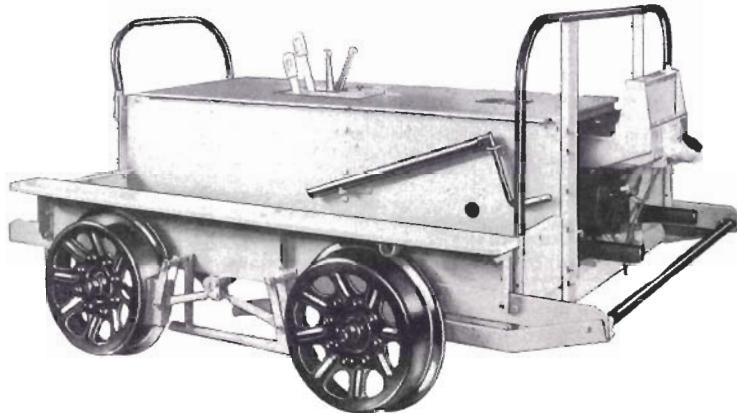


# SERVICE INSTRUCTIONS AND PARTS LIST

## Fairmont

### C7 SERIES A LIGHT SECTION CARS



This bulletin contains instructions and lists car parts that are common to all C7 motor cars. Listed below are specific bulletins to cover a complete car.

CD7 Series A Group 1 has OD-B engine  
CAR PARTS -- Bulletin 784  
ENGINE -- Bulletin 285  
CARBURETOR -- Bulletin 461  
TIMER -- Bulletin 440

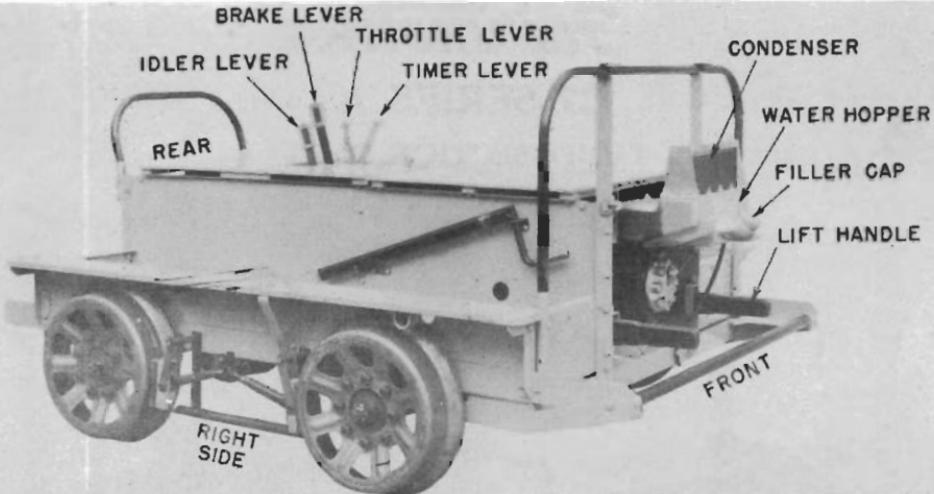
CR7 Series A Group 1 has RO-C engine  
CAR PARTS -- Bulletin 784  
ENGINE -- Bulletin 546  
CARBURETOR -- Bulletin 461  
TIMER -- Bulletin 646

CK7 Series AA Group 1 has RK-B-4 engine  
CAR PARTS -- Bulletin 784  
ENGINE, CARBURETOR AND TIMER -- Bulletin 746

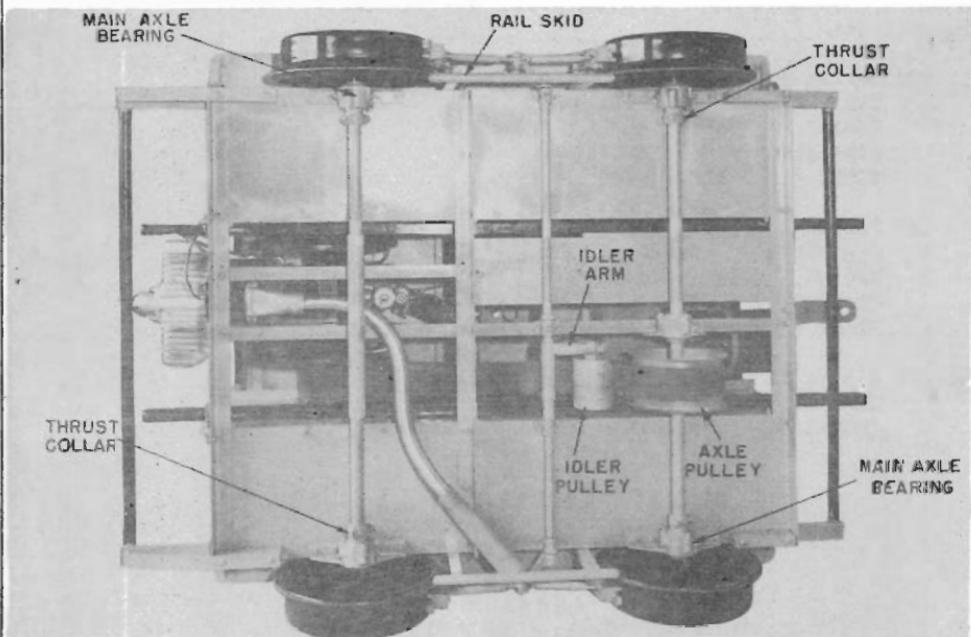
FAIRMONT RAILWAY MOTORS, Ltd.

ISLINGTON, ONTARIO

CANADA  
Printed in U.S.A.



These illustrations show a general view, and the underside of a standard car, with the more important parts pointed out. Reference is frequently made to these parts throughout the bulletin, and the user should thoroughly familiarize himself with them and their functions before placing the car in service or making adjustment and repairs.



**GENERAL INFORMATION**

This bulletin contains common operating instructions and lists common repair parts used on all C7 motor cars. See engine bulletin for operating instructions and parts for a particular engine installation. Also see page 25 for parts used only on specific cars.

**PREPARING CAR FOR SERVICE** Inspect everything for possible damage in transit. If in bad condition make a full report to supervising officials at once.

Be sure switch button on car seat is down, then attach high tension cable to spark plug and connect the loosened wire in battery box. Examine all bolts, nuts, and electrical connections for tightness. See that all cotter pins are spread open.

Fill the grease gun with a grease which will not congeal at 40° below zero and will not flow at temperatures of 275°. All major oil companies can furnish such lubricant. Then, lubricate the four main axle bearings, drive axle center bearing, idler pulley, idler arm pivot, differential axle and brake shaft bearings.

Remove filler cap from water hopper and pour in clean water up to level of the filler neck. A small carton of rust preventative is included in the packing box with each new unit and it is recommended this be regularly used, except do not use with permanent type antifreeze mixtures.

Remove gas tank filler cap at rear of car and fill tank with oil and gasoline mixed according to instructions, in engine bulletin, then replace filler cap. When filling tank, strain fuel through a fine mesh screen funnel or clean cloth free from lint. Open shutoff valve under gas tank. Open drain cock under carburetor, see that gasoline flows, then close it tight.

The spark and throttle levers stand vertically. The right hand one is the throttle, the left one the timer control. The carburetor control knob located at the left of belt plate on control panel turns to open or close the needle valve, and pulls up to choke carburetor. Cars are equipped with a push-pull ignition switch located at left rear corner of control panel. The switch is in the "on" position when the switch button is pulled up from the control panel and in the "off" position when pushed down.

Finally set car on the track and operate the controls to become familiar with them. Release brake and idler levers, and see that car rolls freely. Be sure wheels and axles run true, and brake shoes do not drag.

**HANDLING THE CAR**

Pull out extension lift handles when setting car on and off the track. Be careful not to strike axle pulley on rails. Use care in setting off at crossings, switches and frogs so axles are not sprung by pinching wheels in flangeways. Avoid heavy jars and rough handling at all times.

**STARTING THE CAR**

See engine bulletin for instructions covering starting, stopping and reversing engine. Control levers should be set according to instruction plate on car seat.

Always drive with the engine ahead in normal service. After starting and warming up the engine, seat passengers, operator facing ahead, and release brake. Gradually open the throttle and, at the same time, tighten the belt by slowly pushing idler lever ahead. This allows the belt to slip and act as a clutch.

**DRIVING  
THE CAR**

After car gets under way, tighten idler enough to prevent belt slippage, and latch the lever. Use throttle to regulate speed, and for average conditions the spark should be well advanced, for one cylinder engines. For two cylinder engines timer lever setting should be varied in relation to car speed for best operation.

Always drive a new car slowly and carefully until thoroughly familiar with the controls. A speed of 15 to 20 miles per hour for the first 500 miles is recommended.

If the car loses speed or the engine knocks on hard pulls with open throttle, partially retard the spark, and slip the belt a little if necessary. When coasting down light grades, the belt can be released and throttle closed, thereby saving fuel. In descending heavy grades, the engine can be used as a brake by leaving belt tight, closing throttle and cutting off ignition. When coasting long distances, maintain slight throttle opening to furnish lubrication for internal engine parts.

**STOPPING  
THE CAR**

First close the throttle, then retard the spark part way. Next release idler lever to slacken belt and apply the brake. Shut off ignition to stop engine if car is to be removed from track.

**REVERSING  
THE CAR**

To reverse a battery ignition car without cranking, release belt and bring car to a full stop, allowing the engine to run slowly. Then reverse the engine after which the car can be driven in the other direction.

**LUBRICATION**

The same grade of oil that is mixed in the gasoline is satisfactory for general lubrication of the car. Always mix  $\frac{3}{4}$  pint of oil with each gallon of gasoline. This mixture lubricates all internal moving parts of the engine.

Once a week force some grease into fittings on main axle center bearing. Grease the differential axle each day or two.

Once a month inject a teaspoonful of oil into oiler on idler arm. Occasionally oil idler pivot on brake shaft, controls and brakes.

**GENERAL  
SUGGESTIONS--  
SAFETY FIRST**

Inspect the car before starting out each day, and make sure it is in good operating condition. Once a week clean the entire car thoroughly, examining gasoline joints, electrical connections, bolts, screws, etc., and tighten all loose parts.

When making inspection, see that:

- (1) Wheel tires are not worn dangerously thin.
- (2) Wheels and axles run true.
- (3) Axle end nuts are secured by cotters.
- (4) Wheel hub bolts are tight.
- (5) All wheels are tight on axles.
- (6) All pulleys are aligned and belt runs true.
- (7) Brake is in first class working condition.

Load baggage and tools carefully to prevent their working into moving parts or falling off the car.

Drive slowly with car under full control where there is not a clear view ahead, over road crossings, through gangs of workmen, through railroad yards, and over frogs and switches. Don't drive during rain or snowstorms or foggy weather unless necessary, and then only with a lineup and extra precaution. When following other motor cars or trains, remain 500 feet or more

behind. Adhere strictly to local railroad motor car rules.

#### BELT IDLER

For ordinary driving, when the idler lever is latched in the first notch in the guide plate, the belt should be just tight enough to propel the car without slipping. The coiled spring under the nut on the threaded end of idler control rod cushions the drive and protects all parts from excessive strains. To increase belt tension, screw down the nut--to reduce tension, back it off. Adjust tension so the coiled spring does not compress solidly together when idler is in operating position.

The idler pulley runs on two single row taper roller bearings packed in lubricant. Once a month, inject about a teaspoonful of oil in through oiler. In cold weather, thin lubricant with light oil. Clean and repack bearings yearly.

To disassemble pulley, first remove it from the idler arm. Remove cover, and lightly drive on opposite end of shaft, forcing out one outer race and both inner races. Inner races can be pressed or driven off the shaft. Reassemble in reverse order. To adjust idler bearings, remove or add shims under pulley cover. There should be .003" to .005" end play in bearings when cover is tight.

#### ENDLESS CORD BELT DRIVE

Always leave the belt slack when car is not in use. The endless cord belt is "endless," and it must not be cut or laced. Properly cared for, it will give many thousands of miles' service. Never use belt dressing on the belt. If the belt glazes over and slippage cannot be overcome by increasing idler tension, scrub the inner belt face with a rag saturated in gasoline from the fuel tank. Also clean pulley faces, then dust a little tire talc or powdered soapstone on belt and pulleys.

To change belts: release idler, and remove engine pulley, then run the belt off over the axle pulley flange. Lift the rear of car about a foot and securely block up under the frame. Remove right rear brake shoe, unbolt right rear axle bearing, center bearing, and right hand rail skid. By lightly prying on the axle there will be sufficient clearance between axle bearing and sill to slip out old belt. Then install the new belt, being careful not to damage it on sharp corners. Reassemble in reverse order and tighten center bearing last. Adjust idler if necessary.

#### PULLEYS

The engine pulley is held on the flywheel by three cap screws which should be kept tight. Be sure lock washers are used under the heads and that screw ends do not project through the pulley lugs. The axle pulley and bushing are clamped in place and driven by a key. Keep the clamp bolts tight. Keep pulleys in line so belt runs true and does not rub or climb the flanges.

#### AXLES AND BEARINGS

The axles run on a double row taper roller bearing at each end, and a steady bearing supports the drive axle next to the pulley. When axle bearings require adjustment, it is best to remove them from the car. Unbolt and remove wheel, axle and bearing assemblies. Take off wheels, then jar the bearing assemblies off the axles. If but one bearing requires adjustment, block up end of car and take off brake shoe and wheel adjacent to the bearing, then unbolt and remove bearing.

Take bearings apart and clean with gasoline if the lubricant is dirty or old, then lubricate with light oil. To remove bearings from axle casing, take off the cover, and with a heavy punch, drive against the inner race from the opposite end of the cas-

ing. If necessary, remove remaining outer race by jarring the casing against a heavy wood block. Reassemble in reverse order. Sufficient shims should be used under the cover to obtain .003" to .005" bearing end play with cover bolted tight.

When replacing drive axle on car, be sure all three bearings are in line. If necessary shim under the low one. A slightly sprung axle can usually be straightened cold, but one badly beat should be replaced. Never heat axles.

Two thrust collars on each axle take up end play. To adjust a thrust collar, loosen set screw and clamp bolt, then tap collar snugly against axle bearing. When correctly set, tighten clamp bolt first, then set screw, and finally apply lock wire.

#### DIFFERENTIAL AXLE

Cars are equipped with the FAIRMONT differential axle. It accommodates two tight insulated wheels which turn independently of each other with their respective halves of the axle.

#### WHEELS

Standard Cars use four 16" x  $\frac{1}{2}$ " demountable steel wheels, taper bored for insulation. Insulated wheels are mounted on the tapered axle ends with fibre sleeves in the hubs and fibre washers next to the outer face to provide electrical insulation. Each group is drawn tight by the axle end nut and a steel washer.

Each wheel tire is tightly held on the hub by eight heat treated bolts. Removing these bolts and swinging the brake shoe clear permits of quickly exchanging a tire without taking the complete wheel off the axle. Insulated 16" demountable wheels are easily removed from axles by using M19509 demountable wheel puller, or a shock wheel puller.

Before applying insulation, smooth all burrs in the wheel hub and wipe clean. Then carefully drive the insulating sleeve in until flush with outer hub face; and tighten wheel on the axle with end nut and steel washer, being sure the fiber washer is next to outer hub face. If wheels come too close together (under gauge), tough paper can be wrapped around the axle taper; if too far apart (over gauge), slightly ream the bushing with a taper reamer. Be sure insulated wheels are tight on the taper and all wheels run true.

#### WHEEL

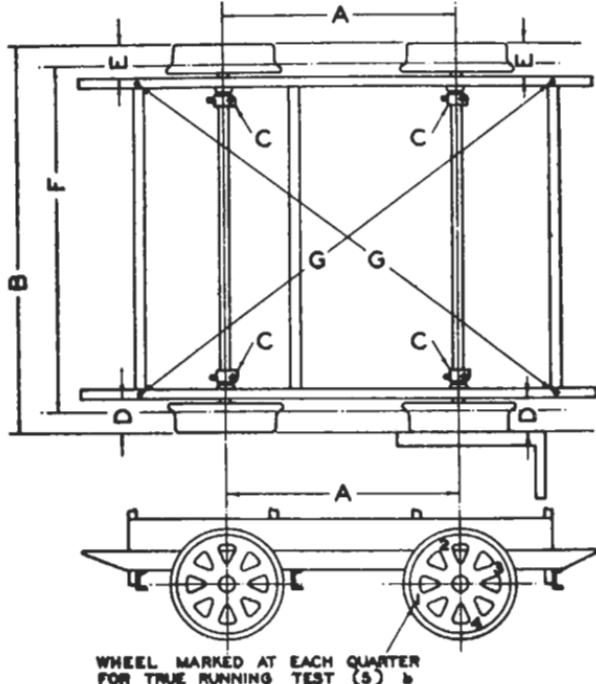
NOTE--Sometimes a small difference in drive wheel circumferences causes a car to run to one side even though perfectly aligned. Again, another car will operate satisfactorily with drive wheels showing more variation. Track conditions, direction of wind, car loading and windshield have some effect on a car, and it may tend to run to one side even when in alignment.

Careful observance of these instructions insures a safe running car. This diagram represents the running gear of any motor car, but the instructions apply to cars with FAIRMONT 16" demountable wheels.

(1) Replace bent or sprung frame members and check frame for squareness. Measurements "G" across corners should be the same if frame is square. Tighten all frame bolts.

(2) Carefully block up under the car frame so all wheels turn freely and frame is level.

- (3) Examine wheels and replace tires with badly worn flanges.
- (4) Drive wheel tires must be approximately the same size. Measure them with a steel tape around the tread, being careful to keep it equidistant from the flanges at all points.
- (5) (a) Rotate wheel and axle assembly, and hold a piece of chalk steady so it just touches outer face of each wheel. If wheel and axle run true, chalk will mark evenly around wheel—if wheel is sprung or axle is bent, chalk will mark the high spot on wheel. Wheels or axles badly out of true usually must be replaced, though axles can sometimes be straightened. A maximum tolerance of  $1/32"$  out of true is recommended on wheel tread, and up to  $1/16"$  out of true on wheel face or flange.
- (b) Another method of check is with a straight edge or two-foot carpenter's square across outer wheel faces (see diagram). Mark each wheel face in quarters and measure from the square to the side sill at each quarter turn of the wheel. The measurements should be the same for each wheel, if the wheel and axles run true.
- (6) Axle center distance "A" should be the same on both sides of car. Axle bearing bolts can be loosened to permit shifting the wheel and axle assemblies a trifle if necessary.
- (7) Cars have the wheels assembled on the axles with a tolerance of  $1/8"$  to  $\frac{1}{4}"$  under standard  $56\frac{1}{2}"$  gauge. This enables



them to operate on under gauge track or canted rail without change. The measurement over outside faces of wheels at "B" is  $62\frac{3}{4}"$  when wheels are  $3/16"$  under standard  $56\frac{1}{2}"$  gauge.

It is preferable to have both axle assemblies drawn to the same gauge when aligning wheels.

(8) New insulating sleeves are sometimes necessary to bring wheels to gauge. Fit them carefully so wheels run true.

(9) With frame approximately centered between the four wheels, the outside faces of left wheels should be in line and parallel with axle bearing sill. Check with a straight edge, tight cord or carpenter's square, being sure distances "E" are both the same. If necessary, loosen and shift thrust collars "C".

(10) Next, check right side of car where distances "D" should also be equal and approximately the same as "E".

(11) Carefully set all thrust collars "C" against bearings. First tighten clamp bolts, then set screws and lock wires.

(12) After thrust collars are set, make another check of wheels to be sure alignment has not been disturbed.

#### BRAKE

To bring the car to a quick stop, apply the brake with firm, steady pressure, yet allowing the wheels to revolve. Go over the brake when weekly car inspection is made, and tighten bolts and adjust shoes if necessary. Be sure cotters are spread.

To adjust brake, disconnect adjustable toggles on both sides of car, unscrew the eyebolt or yoke on each toggle 2 or 3 turns, then reconnect parts. Try the brake and, if necessary, make further adjustment until all four shoes take hold equally. Be sure the lever can be latched in the first notch in the guide. Install replacement liners when old ones wear thin. Be sure liners and bolts holding them do not touch other metal brake parts, as electric signals might be operated.

#### CAR FRAME AND HOUSING

Keep all frame bolts tight. In case frame members become damaged, straighten them; or if badly out of shape, replace. Unlatching and raising the seat top permits inspections and adjustments to be quickly and easily made.

#### ENGINE MOUNTING

The engine is held on the engine sills by four 7/16" bolts with nuts and lock washers. They should be kept tight.

## INSTRUCTIONS FOR ORDERING PARTS

When this bulletin is received, complete the following motor car record from the FAIRMONT name plates on the car and on the engine water hopper. The engine number is also stamped on top of the crankcase. Always mention these factory serial numbers when writing about the car or ordering parts.

Factory Car No. \_\_\_\_\_ Class \_\_\_\_\_ Series \_\_\_\_\_

Group \_\_\_\_\_ Special \_\_\_\_\_

Factory Engine No. \_\_\_\_\_ H. P. \_\_\_\_\_ Type \_\_\_\_\_

Group \_\_\_\_\_ Special \_\_\_\_\_

### TO INSURE PROMPT AND CORRECT SHIPMENT of parts, always give:

- (1) Quantity of each part wanted.
- (2) Symbol number of part as shown in this book.
- (3) Description of part as shown in this book.
- (4) Factory serial numbers recorded above.
- (5) Car gauge if other than 56 $\frac{1}{2}$ " standard.
- (6) State whether shipment is to be by mail, express, or freight.

All parts are shipped f.o.b. factory, transportation charges to be paid by customer. Terms are strictly cash with order.

Parts are listed by description, symbol and quantity, and all important items are illustrated. Quantities in right-hand columns show the number of parts in each assembly or group. Items printed in capitals are assemblies which include all parts listed immediately following and indented to the right. When assemblies can be used, always order them to save work of fitting separate parts. If in doubt as to any part wanted, send full description or sketch, or send old part with order.

For descriptive purposes the engine end of car is named front, and right and left are determined by looking from rear to front.

Common bolts, nuts and washers are not listed in this bulletin, as they can be obtained from any railroad store department.

The numerical part list on pages 10 and 11 contains all items shown in the parts section covering standard direct belt drive battery ignition cars. Spare parts for accessories, and parts used on special cars only, are not listed in this index.

This bulletin 784, pages 1 through 25, covers a complete list of car parts only. Page 25 lists the parts required for the particular type of engine being used. See page 1 for bulletins covering engine, carburetor and timer.

## CAR IDENTIFICATION

To accurately identify cars, all units carry a designation depending on the engine used as follows:

- Class CD7 Series A Group 1 has OD-B engine.  
Class CR7 Series A Group 1 has RO-C engine.  
Class CK7 Series AA Group 1 has RK-B-4 engine.

The class, series and group number are always shown, and cars having changes to customers' specifications also have figures in the space marked "Special".

## NUMERICAL PART INDEX

SYMBOL	PAGE	F6584	13	M19942A	17	70231	23
C-48	15	M6738	15	M21013	23	70233	23
D-48A	15	F7020	21	M21014	23	78389	23
TF-68F	18	F7021	23	M21018	23	78390	23
M102	21	F7022	13	M21281	21	78391	23
F1007	17	F7106	19	M22500	19	78404	23
F1040	21	F7120	19	M22506	23	78405	23
F1081	15	F7121	13	M24813A	21	78406	23
F1103	17	F7242	24	M24814	21	78407	23
A1127A	21	F7244	24	M26831	21	78408	23
A1128	21	M7362	23	M26834	23	78409	23
F1222	19	F7506	13	M27675	23	78410	23
F1402	15	M7556	21	M28351	19	78411	23
F1493	21	M7677D	17	M28356	19	78412	23
F1649	21	F7876	13	M28761	19	78421	23
F1688	13	F7877	13	M29229	19	78422	23
F1702	21	F7923	13	M29230	19	78423	23
M2314	15	F7950	13	M29630A	21	78424	23
F2493	19	F7953	15	M30339	17	78425	23
F2702	19	F7954	15	M30340	17	78426	23
F2703	17	F7955	15	M30341	17	78427	23
F2737	17	F7956	15	M30450	21	78428	23
F2753	17	F7957	15	M30451	21	78429	23
F2766	21	F8037	13	M30452	21	78430	23
F2866	19	F8039	13	M32621	17	78431	23
F2877	21	F8085	13	M33220A	21	78432	23
F2945	15	F8086	13	M33221A	21	78433	23
F2946	15	M8509	17	M33222	19	78436	23
F2948	15	M8510	17	M33436	21	78439	23
F2958	15	F8692	13	M33771	23	78442	23
F3011	24	F9182	15	M33772	23	78443	23
F3029	13	F9217	19	M34410	13	78445	23
F3054	13, 17, 19	F9231	24	M35038	13	78446	23
F3132	24	F9681	23	M35062	13	78448	23
F3543	23	F10601	17	M35511	23	78449	23
F3718	17	M11405	17	M35576	24	78450	23
F3853	13	M11410	17	M35752	21	78453	15
F3854	13	M11479	17	M35753	21	78454	15
F3855	13	F11488	15	M35754	21	78455	15
F4026	13	M12177	17	M35798N	17	78456	15
F4125	15	M15225	21	M36331A	13	78457	15
F4216	21	M15226	21	M36389	13	78458	15
F4252	17	M15340A	21	M36399	15	78459	15
F4413	15	M15351N	17	M36400	15	78460	15
M4442	17	M16102	17	M36601	19	78461	15
M4447	17	M16103	17	41039	16	78465	24
F4635	17	M16104	17	41365	24	78466	24
F4697	24	M16397	19	44954	18	78467	23
F4770	21	M16718	19	48862	23, 24	78468	23
F5158	17	M16724A	19	48870	13	78469	23
F5193	13	M16725	19	50218	23	78470	23
F5254	21	M16730	19	50917	23	78471	23, 24
F5493	17	M16736	19	55607	17	78472	23, 24
F5603	15	M17193	19	55608	17	78473	24
F5652	15	M18043	21	56246	19	78474	24
F6471	13	M18663	17	58842	17	78475	24
F6537	13	M18930	19	58843	17	78476	24
M6540	21	M18931	19	65544	17	78477	24
						78478	24

NOTE-- Items listed on this page are parts as used on a specific car, and are in addition to the common parts listed on page 10. Only one of the three special pages No. 25 is included with the book, according to engine used on a particular car.

### CD7-A-I NUMERICAL PART INDEX

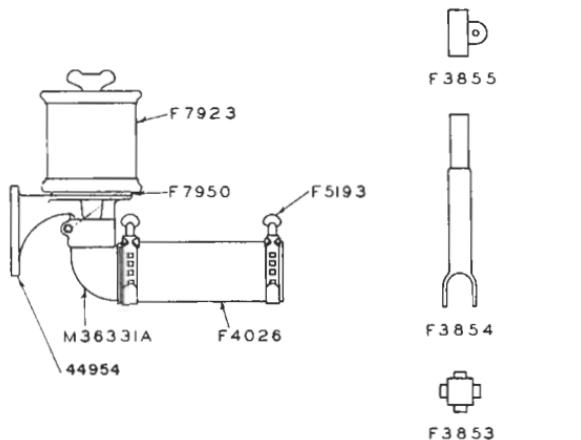
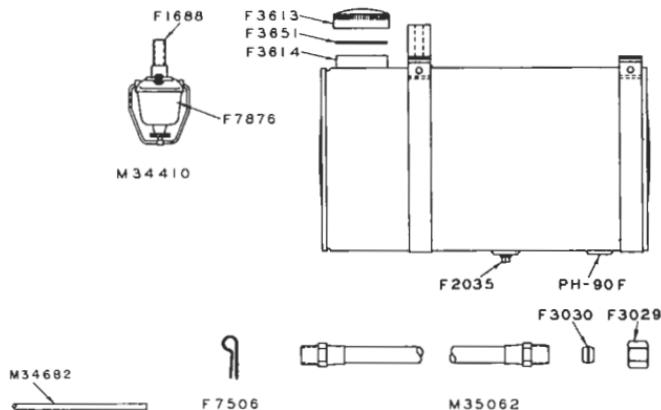
OD-B.....	25D	F3614.....	25D	M15269.....	25D	78395.....	25D
PH-90F.....	25D	F3651.....	25D	M16420.....	25D	78417.....	25D
A638.....	25D	F4314.....	25D	M26452.....	25D	78444.....	25D
A692.....	25D	F7455.....	25D	M32414.....	25D	78451.....	25D
A1318.....	25D	F7702.....	25D	M34499.....	25D	78452.....	25D
F1741.....	25D	F7926.....	25D	M36406.....	25D	78462.....	25D
F2035.....	25D	F7979.....	25D	39871.....	25D	78463.....	25D
F2492.....	25D	F7996.....	25D	48869.....	25D	78464.....	25D
F3006.....	25D	M15066.....	25D	66426.....	25D		
F3613.....	25D	M15069.....	25D	78392.....	25D		

### CR7-A-I NUMERICAL PART INDEX

RO-C.....	25R	F3651.....	25R	M16420.....	25R	78417.....	25R
PH-90F.....	25R	F4314.....	25R	M26777A.....	25R	78444.....	25R
A692.....	25R	F7455.....	25R	M32414.....	25R	78452.....	25R
F1023.....	25R	F7702.....	25R	M34499.....	25R	78462.....	25R
A1241.....	25R	F7762.....	25R	M36406.....	25R	78463.....	25R
A1318.....	25R	F7926.....	25R	39871.....	25R	78464.....	25R
F1741.....	25R	F7979.....	25R	48869.....	25R	78494.....	25R
F2035.....	25R	F7996.....	25R	66426.....	25R	78495.....	25R
F2492.....	25R	M15066.....	25R	69495.....	25R		
F3613.....	25R	M15069.....	25R	78392.....	25R		
F3614.....	25R	M15269.....	25R	78395.....	25R		

### CK7-AA-I NUMERICAL PART INDEX

RK-B-4.....	25K	F9785.....	25K	50519.....	25K	78499.....	25K
C-48.....	25K	F9909.....	25K	69441.....	25K	78501.....	25K
PH-90F.....	25K	F12266.....	25K	69451.....	25K	78502.....	25K
F1023.....	25K	F12269.....	25K	69453.....	25K	78505.....	25K
F1539.....	25K	F12279.....	25K	69495.....	25K	78507.....	25K
F2035.....	25K	F12913.....	25K	69507.....	25K	78509.....	25K
F3079.....	25K	F12937.....	25K	70230.....	25K	78510.....	25K
F3613.....	25K	M13373.....	25K	70742.....	25K	78512.....	25K
F3614.....	25K	F13530.....	25K	73722.....	25K	78513.....	25K
F3651.....	25K	M25998.....	25K	76531.....	25K	78514.....	25K
F4166.....	25K	38505.....	25K	78443.....	25K	78515.....	25K
F6473.....	25K	46565.....	25K	78449.....	25K	78516.....	25K
F7926.....	25K	46570.....	25K	78496.....	25K	78517.....	25K



**NOTE--** Listed on page 25 are additional parts that are required for installation of a particular engine, as follows:

Engine pulley, engine mounting parts and exhaust system  
 Housing side panel (left) and foot board (left)  
 Fuel tank and mounting parts.  
 Some throttle, timer and carburetor control parts  
 Spark coil and most of the ignition wires

## FUEL SYSTEM

**NOTE--** See page 25 for fuel tank and mounting parts.

FUEL STRAINER WITH NIPPLE .....	M34410	1
Nipple 1/8 x 3/4" brass .....	F1688	1
Strainer Bowl (glass) .....	F7876	1
Gasket (strainer bowl) .....	F7877	1
Screen (strainer) .....	F8692	1
Street Elbow 1/8" (flexible line to strainer) .....	F6584	1
FLEXIBLE FUEL LINE - 7" (with sleeve and nut) .....	M35062	2
Compression Nut .....	F3029	3
Compression Sleeve .....	F3030	3
Fuel Pipe (ill. M34682) .....	M35038	1
Support Clip (fuel pipe) .....	F7506	2

## AIR CLEANER

SCREEN ASSEMBLY WITH COVER (includes wing nut and stem) ...	F7923	1
Top only (cover) .....	F8085	1
Wing Nut only .....	F8037	1
Stem only (threaded) .....	F8086	1
Name Plate only (washer) .....	F8089	1
Mounting Bracket (screen assembly) .....	44954	1
Support Plate (bracket) .....	M36389	1
Gasket (screen to bracket) .....	F7950	1
Elbow (below cleaner) .....	M36331A	1
Clamp Bolt (elbow) .....	F6471	1
Hex Nut 1/4" (clamp bolt) .....	F7022	1
Hose - 2" diameter (specify length required) .....	F4026	3 1/2"
Hose Clamp .....	F5193	2

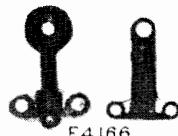
## CONTROLS

**NOTE--** See page 25 for controls other than those listed below.

Timer Control Lever .....	48870	1
Spring (control lever friction) .....	TF-68F	1
Hex Nut 3/8" self locking .....	F7121	1
Universal Spider (carburetor control) .....	F3853	1
Sleeve (adjusting rod) .....	F3854	1
Choke Sleeve .....	F3855	1
Choke Wire (specify length required) .....	F3054	1
Washer (choke sleeve) .....	F6537	1



F1081



F4166



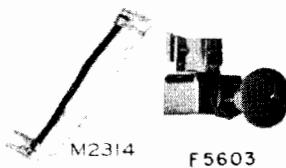
M36406



F9182



F7455



M2314

F5603



10069



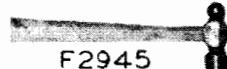
C-48



M6738



F2948



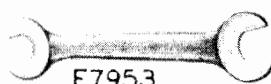
F2945



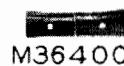
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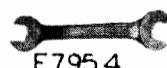
F5652



F7953



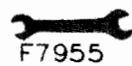
M36400



F7954



D-48A



F7955



F7956



F7957



F4413

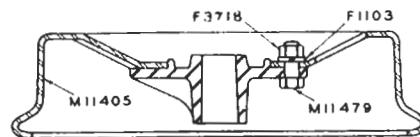
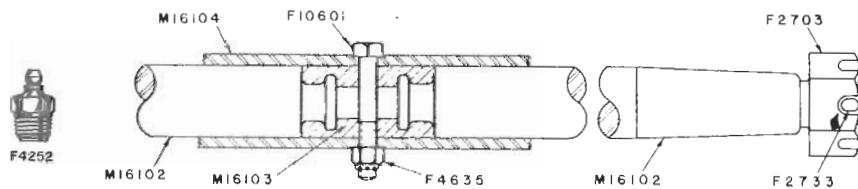
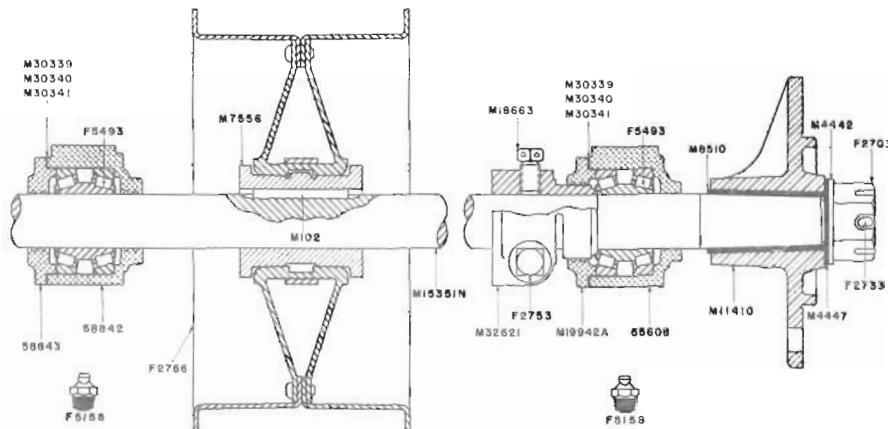
## BATTERY IGNITION EQUIPMENT

**NOTE -- See page 25 for coil, wires and spark plug.**

BATTERY AND TOOL BOX .....	78453	1
Bottom Board .....	78454	1
Side Board (front) .....	78455	1
Side Board (rear) .....	78456	1
End Board .....	78457	2
Support Angle .....	78458	2
Rubber Strip (specify length required) .....	F11488	
Divider Board (longitudinal - front) .....	78459	1
Divider Board (longitudinal - rear) .....	78460	1
Divider Board .....	78461	2
Dry Cell (CK7-AA-1 cars use 5) .....	F1081	4
Connector (battery - CK7-AA-1 cars use 4) .....	M2314	3
Rubber Cap (high tension terminal-coil-CK7-AA-1 cars use 4) .....	F9182	1
Switch (push-pull) .....	F5603	1
Cable Clip (fibre) .....	C-48	5
Hi Tension Wire (plain-no terminals-specify length req.) .....	F1402	
Primary Wire (plain-no terminals-specify length req.) .....	F2958	

## TOOLS

Grease Gun .....	F4125	1
Oil Can .....	F5652	1
Wrench (spark plug) .....	M36400	1
Handle (spark plug wrench) .....	D-48A	1
TOOL KIT (in bag) .....	M36399	
Draw String Bag .....	M6738	
Ball Pein Hammer .....	F2945	
Pliers - 6" .....	F2946	
Screw Driver - 3" .....	F2948	
Connecting Rod Socket Wrench .....	F4413	
End Wrench 7/16 & 3/8" openings .....	F7957	
End Wrench 9/16 & 1/2" openings .....	F7956	
End Wrench 3/4 & 5/8" openings .....	F7955	
End Wrench 7/8 & 13/16" openings .....	F7954	
End Wrench 15/16 & 1" openings .....	F7953	
Rust Preventative .....	41039	

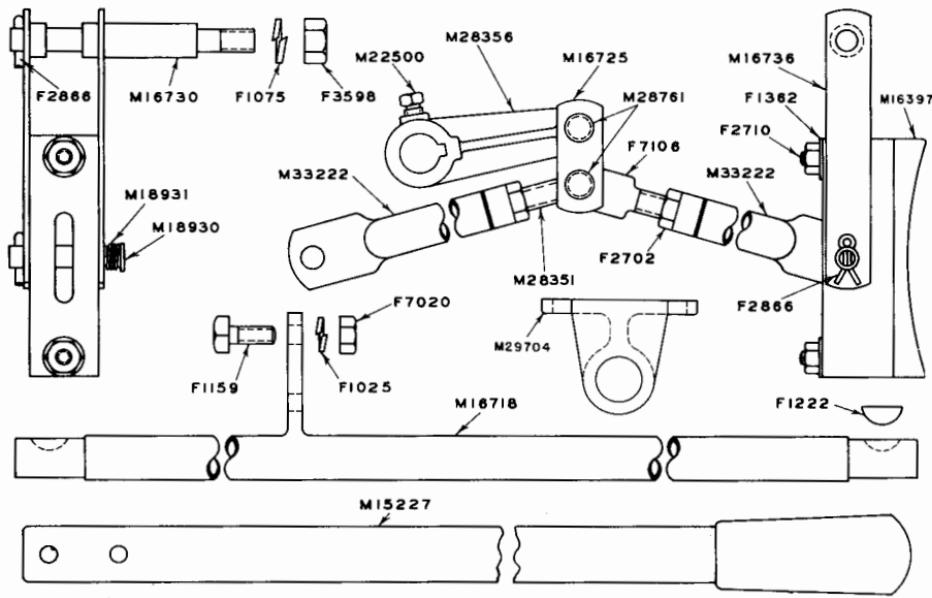


## AXLES - AXLE BEARINGS - THRUST COLLARS

DRIVE AXLE 1-7/16" (with nuts and cotters) .....	M15351N	1
Axle End Nut (use F2733 cotter) .....	F2703	2
DIFFERENTIAL AXLE 1-7/16" (with nuts and cotters) .....	M35798N	1
Axle Half .....	M16102	2
Grease Fitting .....	F4252	1
Split Bushing (both halves) .....	M16103	1
Axle Sleeve .....	M16104	1
Center Bolt 5/16 x 2-1/2" (axle sleeve) .....	F10601	1
Hex Elastic Stop Nut 5/16" .....	F4635	1
Axle End Nut (use F2733 cotter) .....	F2703	2
CENTER BEARING 1-7/16"	65544	1
Bearing Casing only .....	58842	1
Grease Fitting .....	F5158	2
Bearing with Races .....	F5493	1
Cover (bearing casing) .....	58843	1
Cover Shim (.010 steel) .....	M30339	1
Cover Shim (.007 steel) .....	M30340	3
Cover Shim (.005 steel) .....	M30341	4
Cap Screw 3/8 x 1" hex head .....	F1007	3
MAIN AXLE BEARING 1-7/16"	55607	4
Grease Fitting .....	F5158	8
Bearing Casing only .....	55608	4
Bearing with Races .....	F5493	4
Cover (bearing casing) .....	M19942A	4
Cover Shim (.010 steel) .....	M30339	4
Cover Shim (.007 steel) .....	M30340	8
Cover Shim (.005 steel) .....	M30341	12
Cap Screw 3/8 x 1" hex head .....	F1007	12
THRUST COLLAR 1-7/16" (assembled) .....	M32621	4
Clamp Bolt (thrust collar) .....	F2753	4
Hex Half Nut 1/2" .....	F2737	4
Set Screw (drilled head) .....	M18663	4
Lock Wire (per foot) .....	F3054	26"

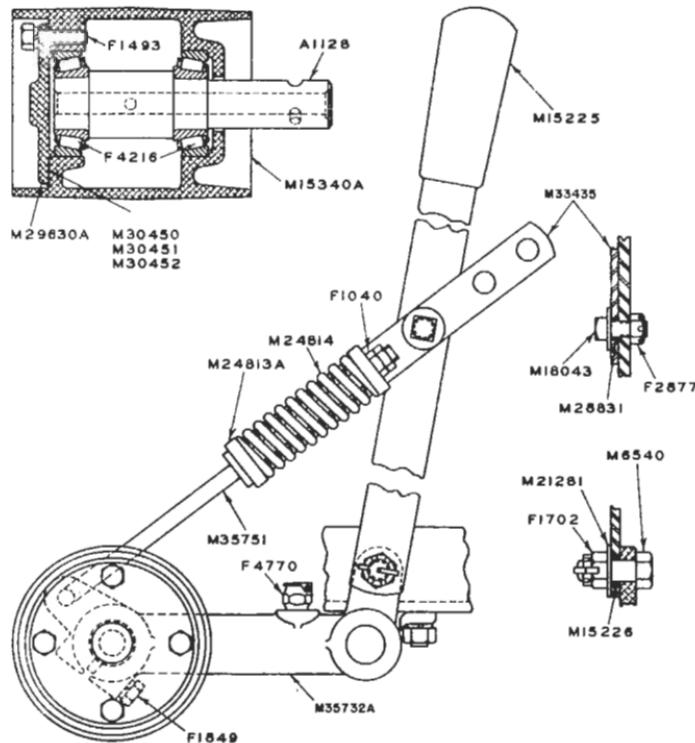
## WHEELS - INSULATION

16" x 1/4" DEMOUNTABLE WHEEL (taper bored) .....	M7677D	4
Hub only (taper bored) .....	M11410	4
16" x 1/4" Demountable Tire only .....	M11405	4
BOLT SET (8 each bolts, nuts, and lock washers) .....	M12177	4
Hub Bolt (alloy steel) .....	M11479	32
Hex Nut 5/8" SAE .....	F3718	32
Lock Washer 5/8" .....	F1103	32
INSULATION 1-7/16" (3-piece) .....	M8509	4
Insulating Bushing 1-7/16" .....	M8510	4
Insulating Washer .....	M4447	4
Steel Washer .....	M4442	4



## BRAKE

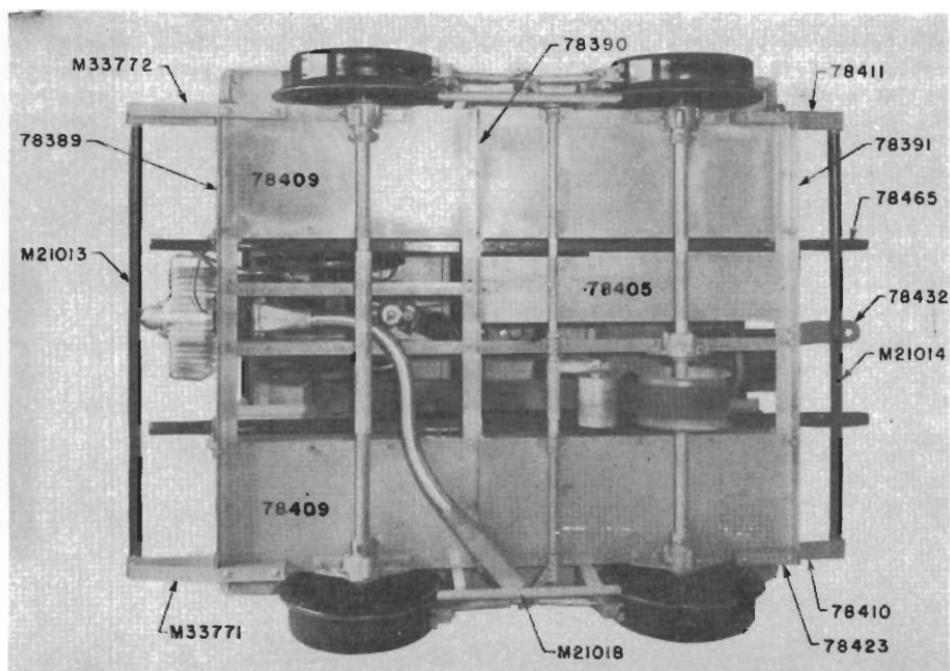
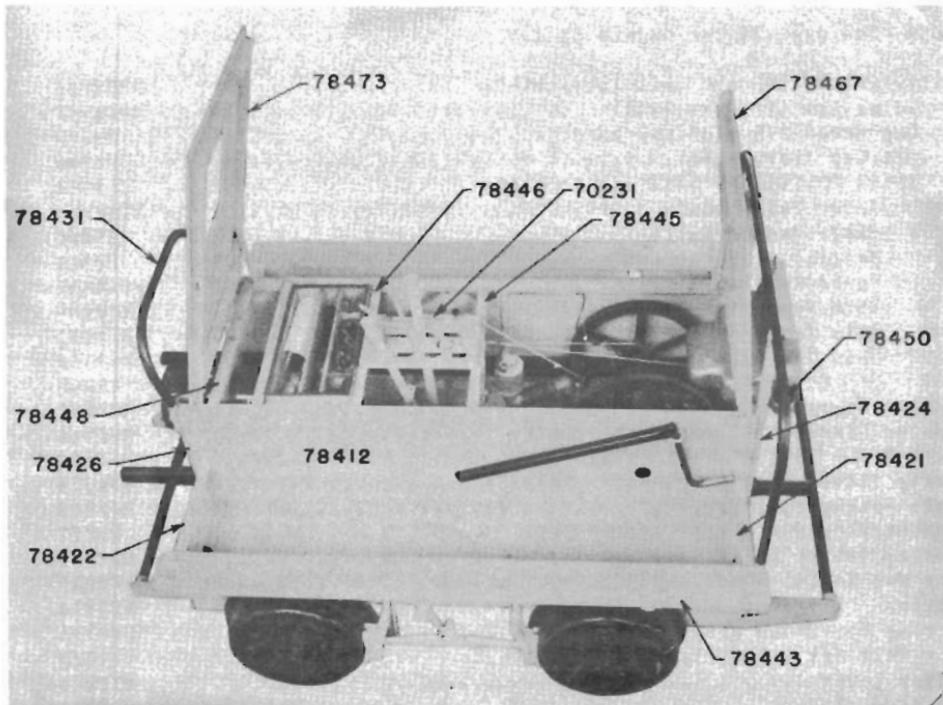
Brake Lever only 5/16"	56246
Bolt 3/8 x 1-1/4" (brake lever to shaft)	M36601
Hex Slotted Nut 3/8"	F2493
Brake Shaft	M16718
Bearing (brake shaft - ill. M29704)	M16724A
Grease Fitting	F9217
End Arm (brake shaft)	M28356
Set Screw (end arm)	M22500
Lock Wire (set screw - specify length)	F3054
Key (end arm)	F1222
Toggle Link	M16725
Pin (toggle link - 1/2 x 1-3/4")	M28761
BRAKE SHOE WITH LINER (assembled)	M17193
Liner (brake shoe)	M16397
Hex Nut 5/16" self locking	F7120
Pivot Stud (use F3598 nut)	M16730
TOGGLE ARM (with yoke)	M29229
Body only (toggle arm)	M33222
Yoke (toggle arm)	F7106
Lock Nut 1/2" - 12 thd.	F2702
TOGGLE ARM (with eye bolt)	M29230
Body only (toggle arm)	M33222
Eye Bolt (toggle arm)	M28351
Lock Nut 1/2" - 12 thd.	F2702
Shoe Hanger	M16736
Hanger Pin (brake shoe)	M18930
Spring (hanger pin)	M18931
Cotter 3/16" x 1"	F2866



## IDLER - BELT - PULLEY

NOTE--See page 25 fpr engine pulley.

IDLER PULLEY AND ARM (oil lubricated) .....	M33220A	1
Idler Arm (ill. M35732A) .....	M33221A	1
Cap Screw 3/8 x 2" hex head .....	F1649	1
Oil Cup (idler arm) .....	F4770	1
IDLER PULLEY AND SHAFT (assembled) .....	A1127A	1
Idler Pulley only .....	M15340A	1
Shaft (idler pulley) .....	A1128	1
Bearing with Races .....	F4216	2
Cover (pulley - plain) .....	M29630A	1
Shim (cover - .010 steel) .....	M30450	1
Shim (cover - .007 steel) .....	M30451	2
Shim (cover - .005 steel) .....	M30452	3
Cap Screw 5/16 x 1" hex head .....	F1493	4
Spacer Sleeve 4" (on brake shaft) .....	M35752	1
Spacer Sleeve 5/8" (on brake shaft) .....	M35753	1
Pull Rod - 14-1/8" (ill. M35751) .....	M33436	1
Strap (lever to spring - ill. M33435) .....	M35754	1
Bolt (strap to lever) .....	M18043	1
Hex Slotted Nut - 3/8" (strap bolt) .....	F2877	1
Spacer (strap bolt) .....	M26831	1
Hex Nut (guide stud) .....	F7020	1
Spring - 3-1/2" .....	M24814	1
Spring Seat (use with M24814) .....	M24813A	2
Hex Half Nut - 3/8" (pullrod) .....	F1040	2
Idler Lever .....	M15225	1
Bushing (lever) .....	M15226	1
Cap Screw (idler lever) .....	M6540	1
Washer (cap screw) .....	M21281	1
Castle Nut 1/2" SAE .....	F1702	1
Endless Cord Belt 3-1/2 x 106-1/4" .....	F5254	1
Axle Pulley (with bolts - 10" split steel) .....	F2766	1
Bushing (1-7/16 bore - axle pulley - cut apart before using) .....	M7556	1
Key (axle pulley bushing) .....	M102	1



## FRAME, DECK AND HOUSING

NOTE-- See page 25 for engine sills, left side panel and left foot board.

Axle Bearing Sill (right)	78410	1
Axle Bearing Sill (left)	78411	1
Cross Angle (front)	78389	1
Cross Angle (middle)	78390	1
Cross Angle (rear)	78391	1
Deck (right and left)	78409	2
TOOL TRAY END (front)	78421	2
Loop (windshield strap)	50218	4
Tool Tray End (rear)	78422	2
Spacer Washer	M27675	4
LUNCH BUCKET TRAY	78404	1
Bottom Board	78405	1
Side Board	78406	1
End Board (front)	78407	1
End Board (rear)	78408	1
Drawbar	78432	1
Saddle (drawbar)	M26834	1
Set-off Block	78423	4
Set-off Skid (right)	M33771	1
Set-off Skid (left)	M33772	1
Lift Pipe (front)	M21013	1
Lift Pipe (rear)	M21014	1
Saddle (lift pipe)	M7362	4
Foot Board (right)	78443	1
Bearing (starting crank - on foot board)	78449	
Support Bracket (foot board - R. F. & L. R.)	78433	
Support Bracket (foot board - L. F. & R. R.)	78436	
Support Bracket (foot board - center)	78439	
Wheel Guard	78442	
Rail Skid (right and left)	M21018	
Corner Post (housing - R. F.)	78424	
Corner Post (housing - L. F.)	78425	
Corner Post (housing - R. R.)	78426	
Corner Post (housing - L. R.)	78427	
Side Panel (right)	78412	
Spacer Washer	F9681	
Guide (lift handle - front and rear)	78429	
Guide (lift handle - center)	78430	
Spacer (lift handle guide - front and rear)	78428	
Safety Rail (front)	78450	
Saddle (front safety rail)	M7362	
Safety Rail (rear)	78431	
Support Angle (control panel-front)	78445	
Support Angle (control panel-rear)	78446	
Spacer	50917	
CONTROL PANEL WITH WEAR PLATE	70231	
Wear Plate	70233	
Cap Screw 5/16 x 3/4" flat head	F3543	
Hex Nut 5/16"	F7021	
Support Cleat (fuel tank saddle)	78448	
Holder (starting crank - plain)	M22506	
Retainer (starting crank - with loop)	M35511	
SEAT TOP (hinged - front)	78467	
Seat Board	78468	1
Support Angle (right)	78469	1
Support Angle (left)	78470	1
Support Cleat	78471	3
Cover Catch	48862	1
Bushing (cover catch)	48862	1

SEAT TOP (hinged - rear) .....	78473	1
Seat Board .....	78474	1
Support Angle (right rear) .....	78475	1
Support Angle (left rear) .....	78476	1
Support Cleat .....	78471	2
Cover Catch .....	78472	1
Bushing (cover catch) .....	48862	1
Lock Angle .....	78477	1
Bushing (seat top hinge) .....	78478	4
EXTENSION LIFT HANDLE (Complete) .....	78465	2
Lift Handle only .....	78466	2
Reinforcing Strip with Stops .....	M35576	2
Cap Screw 3/8 x 3-3/4" flat head .....	F4697	2
Wood Screw #14 x 1-1/4" flat head .....	F7242	40
Instruction Plate .....	F8011	1
Name Plate .....	F7244	1
Safety First Plate .....	F3132	1
Belt Identification Plate .....	41365	1
Blank Number Plate .....	F9231	1

### PARTS USED ON CR7-A-I CARS WITH RO-C ENGINE

NOTE... Following items are for CR7-A 1 Motor Cars. These parts are in addition to those listed on pages 13 through 24. See Bulletin 546 for engine parts.

Engine Sill (right - welded assembly)	78392	1
Engine Sill (left - welded assembly)	78395	1
Side Panel (left)	78417	1
Foot Board (left)	78444	1
Saddle (fuel tank)	M15269	2
Strap (fuel tank)	M15069	2
Control Rod (throttle)	78494	1
Control Rod (timer)	78452	1
Throttle Lever	48869	1
Adjust Rod with Knob	M34499	1
 Engine (see Bulletin 413)	RO-C	1
Priming Cup	F1741	1
Carburetor (see Bulletin 461)	A1318	1
Spark Plug 18mm	F7455	1
Drain Cock (water jacket)	F1023	1
Pulley 3-1/2" (engine)	A692	1
Support Clip (wiring harness)	M36406	1
Bolt 7/16 x 4" hex head (engine mounting)	F4314	4
Gasket (exhaust elbow)	A1241	1
Ebow (exhaust)	M26777A	1
Cap Screw 3/8 x 1-1/2" hex head	F2492	2
Hex Nut 3/8" brass	F7702	2
Tubing (exhaust - 40")	F7762	1
Clamp (exhaust tubing)	69495	1
Exhaust Outlet (on rail skid)	78495	1
 Coil Block	78462	1
Spark Coil	F7996	1
Wire 6 ft. 0 in. (battery to timer)	78463	1
Wire 41" (coil to switch)	78464	1
Wire 12" (coil to battery)	M32414	1
Wire 38" (switch to timer)	66426	1
Wire 65" (spark plug)	39871	1
Terminal	F7926	2
 FUEL TANK (with cap)	M15066	1
Threaded Bushing (solders in tank)	PH-90F	2
Bayonet Catch (neck for F3613)	F3614	1
Filler Cap (bayonet type)	F3613	1
Gasket (filler cap)	F3651	1
Pipe Plug 1/4"	F2035	1
 Starting Crank	M16420	1
Instruction Plate (starting)	F7979	1