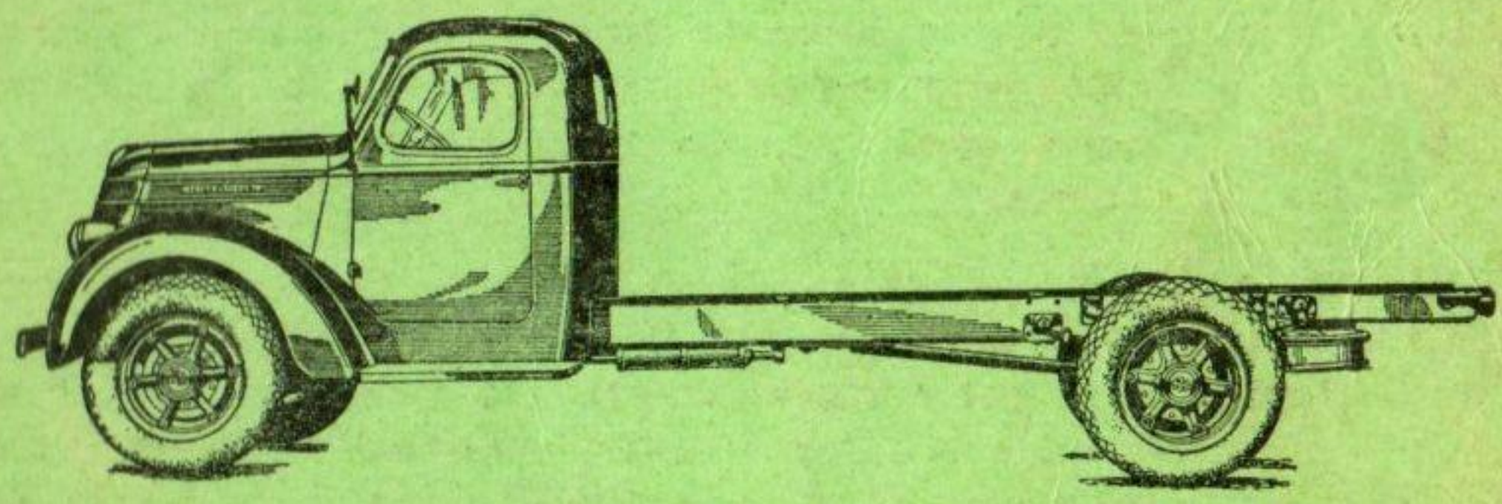
# Instruction Book

# Models

# D-35, DS-35, D-40, DS-40



## including
## illustrations and parts list

---

**Important**

**TO INTERNATIONAL TRUCK OWNERS—**

**This instruction manual has been prepared and is furnished for the purpose of giving the user as much information as possible pertaining to the care and operation of truck. The owner is urged to read and study this book and, if ordinary care is exercised, he will be assured of satisfactory service.**

---


INTERNATIONAL HARVESTER COMPANY
(INCORPORATED)
180 NORTH MICHIGAN AVE. CHICAGO, ILLINOIS, U.S.A.

INT. 3506. 4-29-40—15B. PRESERVE THIS INSTRUCTION BOOK (Dom. & Exp.)

☞ See Lubrication Chart on page 22

## Special Instructions

*Read carefully before attempting to operate truck*

1. The most important thing in operating a truck is proper attention to lubrication. Inspect engine oil daily. Use lubricant recommended on Chart. It is poor economy to use dirty oil or oil of inferior quality.

2. A new truck should not be driven faster than 30 miles an hour for the first 500 miles. The engine should not be raced or worked hard under any circumstances, until it has warmed up and is running smoothly, and with the carburetor choke button pushed "In."

3. Drain and clean "Air Cleaner Oil Cup" every week, or oftener under severe dust conditions.

4. When starting, always engage clutch slowly so that engine will pick up the load gradually. This is particularly necessary when truck is under a heavy load.

5. When ordering parts for replacement, be sure to mention chassis serial number and model of truck, also give engine number.

6. No warranty is made with respect to tires, rims, ignition apparatus, horns, or other signalling devices, starting devices, generators, batteries, speedometers, or other trade accessories, inasmuch as they are warranted separately by the respective manufacturers.

7. All "International" Branches and Service Stations are uniformly equipped to service International Trucks. Every truck owner will receive courteous attention and prompt, efficient service, whether a minor repair or a major overhauling is required. Each Branch carries an adequate stock of "Genuine" replacement parts for all emergencies and well-trained mechanics work according to factory standards.

8. We reserve the right to make changes in design or add any improvements without incurring the obligation to install such changes on motor trucks previously purchased.

---

## *If You Are a Good Driver You Do These Things*

Never try to steer with one or both hands on the hub or spokes of the wheel.

Never drive with an elbow out of the window.

Always look both ways at every intersection.

Stop conversation entirely whenever any maneuvering has to be done.

Never change from one lane to another at an intersection, on a curve, or at the top of a hill.

A good driver is courteous and believes in fair play at all times. Learn to be a good driver. The rules are simple, and you will live longer.

---

*Specifications will be found on inside back cover.*

*CAUTION: Based on the fire hazard and insurance regulations, we do not recommend the use of gasoline for the cleaning of parts. A less inflammable fluid than gasoline should be used, such as Stoddard solvent or kerosene.*

*NOTICE: Inspect fenders, hood, windshield, etc., so that blemishes or injuries received in transit may be noted on the freight bill.*

## To Prepare Truck for Service

### Radiator (Filler Cap is under Hood)

Fill radiator with clean soft water until water comes out of overflow pipe. If clean soft water cannot be obtained, strain through muslin or similar material to prevent foreign matter from entering. Never use water containing lime or other mineral matter. Under no circumstances should cold water be poured into radiator when engine is hot.

During cold weather cover the lower portion of the radiator sufficiently to maintain an engine operating temperature of 160° to 180° F. For continuous cold weather use solutions having a low freezing point.

### Fuel Tank

Never fill tank while engine is running or when an open flame is near. Keep funnel in contact with metal of tank when pouring in fuel to avoid possibility of an electric spark igniting the gas. Be very careful about lighting matches near gasoline, as the air within a radius of several feet is permeated with a highly explosive vapor. See that vent hole in fuel tank cap does not become plugged, as this will prevent proper flow of fuel to carburetor.

### Engine Oil

Be sure that lubricating oil in crankcase is up to the "Full" mark on bayonet type gauge. Use only a good grade of engine oil and refer to the Lubrication Chart. When testing oil level, the bayonet type gauge should be withdrawn and wiped clean; then inserted all the way and withdrawn for a true reading. Never test oil level while engine is running.

### Battery

Be sure water level is 1/2" above separators and plates. Use pure distilled water only.

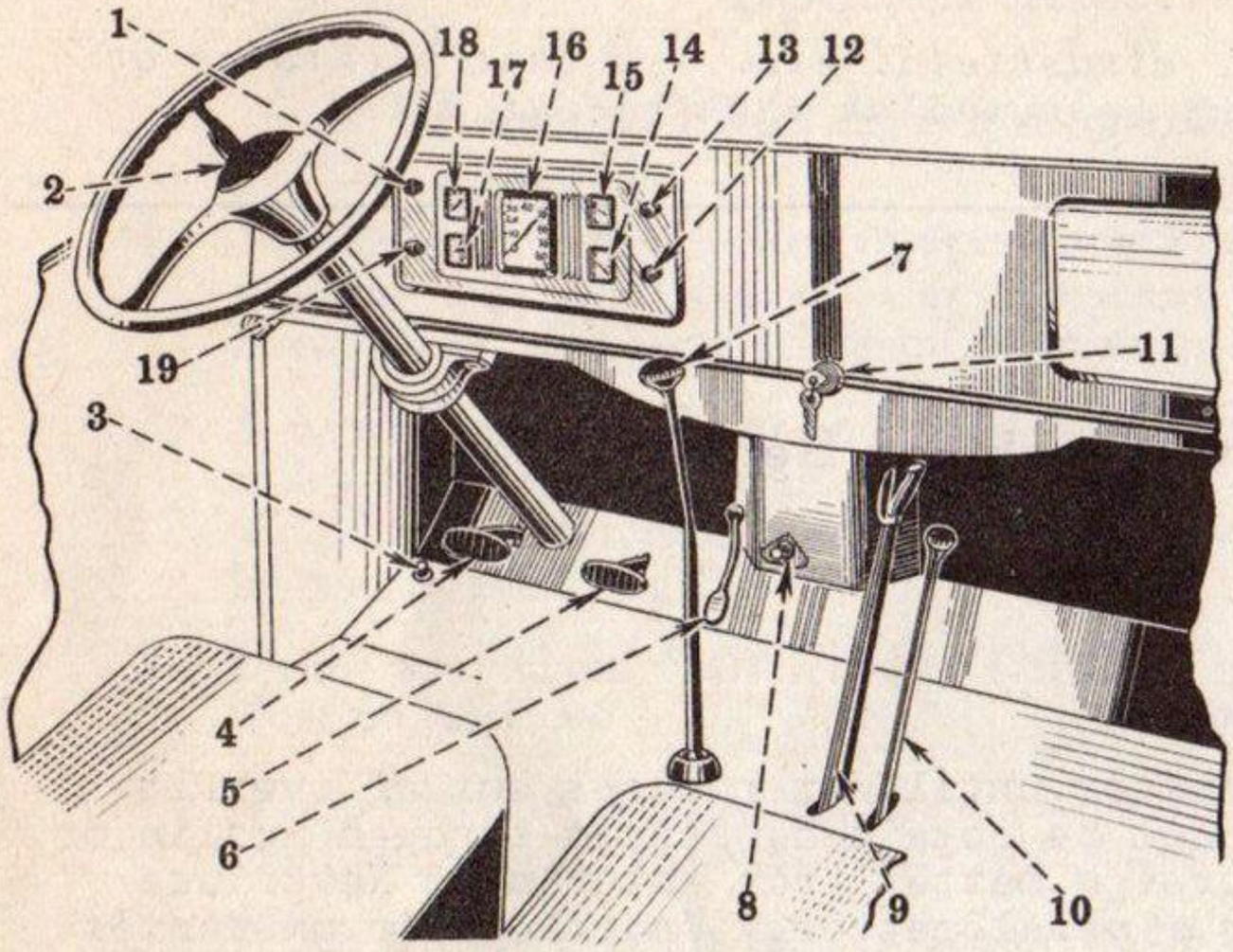
### Tires

Examine tires and be sure they have the proper air pressure. See tire pressure data on inside back cover.

### Hydraulic Brake Master Cylinder

Be sure fluid level is within 3/8" from bottom of filler neck.
*Always use Genuine "Lockheed" Fluid.*

# Operating Instructions




| Ref. No. on Cut | Description |
|---|---|
| 1 | Lighting control switch. |
| 2 | Horn button. |
| 3 | Dimmer switch. |
| 4 | Clutch pedal. |
| 5 | Brake pedal. |
| 6 | Accelerator. |
| 7 | Transmission control lever. |
| 8 | Starting switch. |
| 9 | Hand brake lever. |
| 10 | Two-Speed rear axle gear shift lever (on DS-35 and DS-40 trucks only). |
| 11 | Ignition switch. |
| 12 | Throttle control. |
| 13 | Choke control. |
| 14 | Fuel gauge. |
| 15 | Oil pressure gauge. |
| 16 | Speedometer. |
| 17 | Ammeter. |
| 18 | Water temperature gauge. |
| 19 | Instrument lamp switch. |

## Lighting Control Switch

The sealed beam head lamps, parking lamps and tail lamp are controlled by a single switch operated by a button on instrument panel. When button is pulled half-way out the front fender parking lamps and tail lamp are lighted. When button is pulled out all the way the head lamps and tail lamp are lighted. The head lamp beams can be switched from dim to bright or from bright to dim by pressing on foot dimmer switch located on toe board. Instrument lamp is controlled by a push-and-pull switch on instrument panel.

## Oil Pressure

Pressure on gauge at idling speed (200 to 300 R.P.M.) should read between 10 to 15 pounds, when oil is hot. Maximum pressure is set at the factory to read between 40 to 45 pounds (at 1500 to 1700 R.P.M.). Oil pressure is controlled by a relief valve located on the spark plug side of crankcase, rear end, and is not adjustable.

## TO START ENGINE

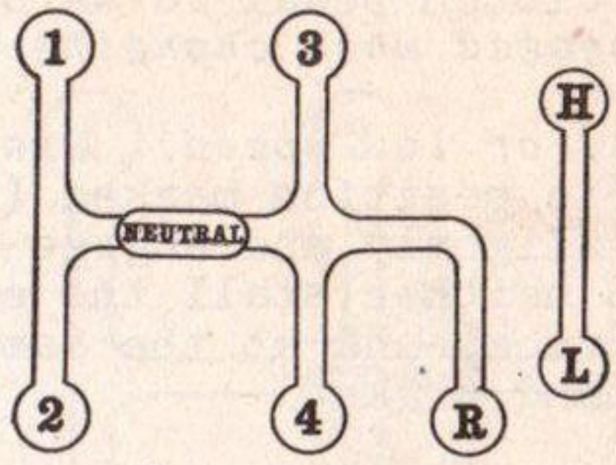
1. Set hand brake lever (pull back).
2. Put gear control lever in neutral position.
3. Pull throttle button 1/3 open. With button 1/3 open the engine will run at excessive speed and throttle button must be gradually pushed in until the proper idling speed is obtained. Do not use throttle except for starting or idling.
4. Insert switch key and turn it to "on" position.
5. Pull choke button 1/2 open. Do not use choke when engine is warm. In extremely cold temperature the choke button may be pulled out full distance, but should be immediately pushed part way in when engine starts. *Caution:-* If choke is not properly used, engine can be seriously injured by allowing unburned gasoline to leak down past the pistons, thus thinning the lubricating oil to a degree where its value as a protecting film between moving parts is entirely destroyed. Because of this, it is recommended that new oil be used more often in extremely cold weather.
6. Push clutch pedal forward and keep it there until the engine is running.
7. Step on starting switch (remove foot from switch the instant engine starts). When engine warms up, gradually push in choke button.

(For D-35 and DS-35 trucks only)

## To Start Truck

Push clutch pedal forward, disengaging clutch. *Clutch must always be disengaged when changing gears.*

*First, or low speed:* Press control lever to the left and push forward to position marked (1). Speed up engine slightly and engage clutch slowly, so as to neither stall the engine nor jerk the truck, and at the same time release the hand brake.




IHC Model "H-41A" Transmission.

*1 - First Speed.*
*2 - Second Speed.*
*3 - Third Speed.*
*4 - Fourth Speed (Direct).*
*R - Reverse.*
*H - High Speed rear axle (DS-35).*
*L - Low Speed rear axle (DS-35).*

*To shift to second speed:* As the truck gains speed, disengage clutch and pull control lever straight back into position marked (2). Engage clutch slowly.

*To shift to third speed:* Disengage clutch and move control lever into neutral position. Press lever to the right and push forward into position marked (3). Engage clutch slowly.

*To shift to fourth speed (Direct):* Disengage clutch, and pull control lever straight back into position marked (4). Engage clutch slowly.

*To shift to lower speed:* A change to a lower gear should be made before engine begins to labor and before truck speed is greatly reduced. To accomplish this shift, disengage the clutch, and move control lever into neutral position, then re-engage the clutch and speed up engine sufficiently to permit shifting to the lower range gears without clashing at which time the clutch should again be disengaged and the shift to the lower gear completed.

## Rear Axle Gear Shift (DS-35 Trucks only)

There are two driving positions for the control lever, forward and back. In forward position (H) the truck operates as a high speed truck. In back position (L) the truck operates as a low speed truck.

When changing from high speed to low speed or from low speed to high speed, the clutch must be operated as if the truck's transmission speed were being changed. If the shift from high speed to low speed is made at over 30 miles per hour, it is necessary to "double clutch"; that is, disengage the clutch and move the control lever into neutral position, then re-engage the clutch and speed up engine sufficiently to permit shifting to low speed without clashing, at which time the clutch should again be disengaged and the shift to the lower speed completed.

## To Reverse

Disengage clutch, stop truck and move control lever into neutral position. Press lever to extreme right and pull back into position marked (R). Engage clutch slowly.

## To Stop Truck

Close throttle and apply foot brake. When truck has slowed down to idle speed of engine, disengage clutch, continuing to apply brakes until truck stops. Put gear control lever in neutral position and apply hand brake when truck has stopped. Clutch may then be engaged.

## To Stop Engine

Close throttle and turn switch to "off" position.

(For DS-40 trucks only)

## To Start Truck

Push clutch pedal forward, disengaging clutch. *Clutch must always be disengaged when changing gears.*

*First, or low, speed:* Press control lever to extreme left and push forward to position marked (1). Speed up engine slightly and engage clutch slowly, so as to neither stall the engine nor jerk the truck, and at the same time release the hand brake.

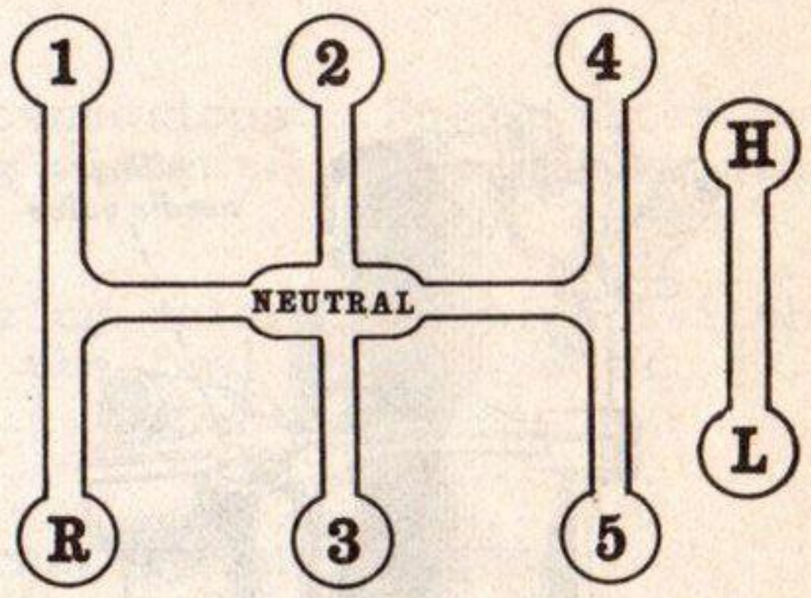
*To shift to second speed:* As the truck gains speed, disengage clutch and move control lever into neutral position; then straight forward into position marked (2). Engage clutch slowly.

*To shift to third speed:* Disengage clutch and pull control lever straight back into position marked (3). Engage clutch slowly.

*To shift to fourth speed:* Disengage clutch, and move control lever into neutral position; press lever to extreme right and push straight forward into position marked (4). Engage clutch slowly.

*To shift to fifth speed:* Disengage clutch and pull control lever straight back into position marked (5).

*To shift to lower speed:* A change to a lower gear should be made before engine begins to labor and before truck speed is greatly reduced. To accomplish this shift, disengage the clutch, and move control lever into neutral position, then re-engage the clutch and speed up engine sufficiently to permit shifting to the lower range gears without clashing, at which time the clutch should again be disengaged and the shift to the lower gear completed.




(IHC Model "F-51C" Transmission)

*1 - First Speed.*
*2 - Second Speed.*
*3 - Third Speed.*
*4 - Fourth Speed.*
*5 - Fifth Speed (Direct).*
*R - Reverse.*
*H - High Speed rear axle.*
*L - Low Speed rear axle.*

## Rear Axle Gear Shift

There are two driving positions for the control lever, forward and back. In forward position (H) the truck operates as a high speed truck. In back position (L) the truck operates as a low speed truck.

When changing from high speed to low speed rear axle or from low speed to high speed, the clutch must be operated as if the truck's transmission speed were being changed. If the shift from high speed to low speed is made at over 30 miles per hour, it is necessary to "double clutch"; that is, disengage the clutch and move the control lever into neutral position, then re-engage the clutch and speed up engine sufficiently to permit shifting to low speed without clashing, at which time the clutch should again be disengaged and the shift to the lower speed completed.

## To Reverse

Disengage clutch, stop truck and move control lever into neutral position. Press lever to extreme left and pull back into position marked (R). Engage clutch slowly.

## To Stop Truck

Close throttle and apply foot brake. When truck has slowed down to idle speed of engine, disengage clutch, continuing to apply brakes until truck stops. Put gear control lever in neutral position and apply hand brake when truck has stopped. Clutch may then be engaged.

## To Stop Engine

Close throttle and turn switch to "off" position.

## Fuel Pump

In some instances engine trouble is attributed to the fuel pump, when in reality it is caused by some other condition. The following should be carefully checked to avoid the needless replacement of the fuel pump.

*Lack of Fuel at the Carburetor:-*

Main fuel tank empty. Leaky fuel pipe or connections. Fuel filter bowl loose, cork gasket broken or dirty filtering element. Loose valve plug or leakage of fuel at the diaphragm.

Remove fuel line at carburetor and run starting motor (ignition switch off). If fuel spurts out of the fuel line, the fuel pump is working.

*Leakage of Fuel at the Diaphragm:-*

Loosen cover screws; then tighten them alternately and securely. Caution: Do not dismantle the pump body. Note: Sometimes there appears to be a leak at the diaphragm, whereas the leak actually exists at one of the pipe fittings and fuel has run down the pump to the diaphragm flange, appearing to originate there.

*If trouble cannot be located after a careful check, take fuel pump to an International Harvester Company Service Station.*

## Fuel Filter

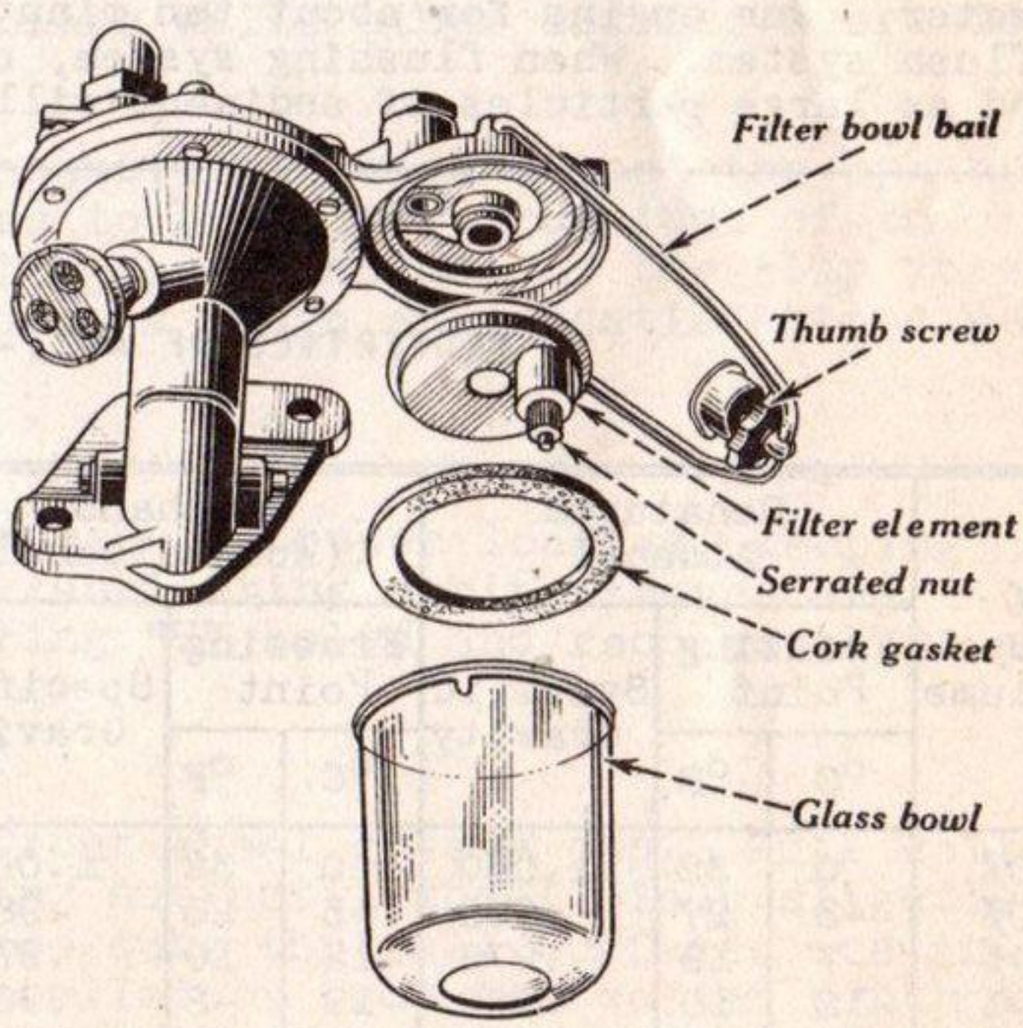
The filter bowl and filtering element should be removed and cleaned periodically.

To Clean: Loosen thumb screw on bottom of filter and remove filter bowl and filtering element. Wash filter bowl in kerosene. The sediment can be removed from the filtering element with a blast of air after serrated nuts on posts have been unscrewed a few turns.

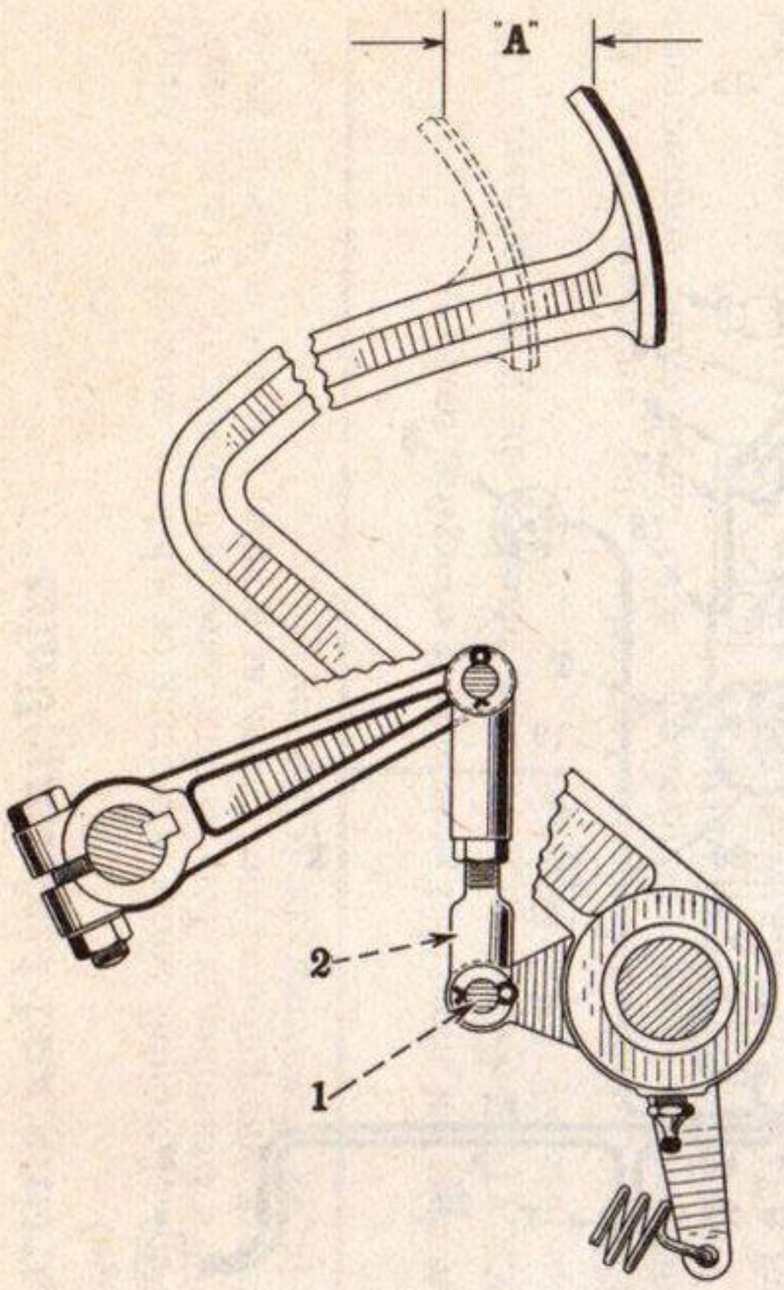
When reassembling be sure that serrated nuts on filter posts are finger tight, cork gasket is in place and thumbscrew is tight.

A leak at the cork gasket will cause erratic action of the pump and retard delivery of fuel to the carburetor.

When a new cork gasket is used, soak it in light engine oil before assembling.



## Clutch Pedal Adjustment




*NOTE: -*
*Keep foot off the clutch pedal except to shift gears or when truck is brought to a stop.*

The correct clearance, or free travel, of the clutch pedal is from 1-1/4" to 1-3/4", *(see "A" on illustration)* that is - when clutch pedal is depressed, there should be from 1-1/4" to 1-3/4" movement in the pedal before clutch starts to disengage. The pedal should be checked occasionally and adjusted whenever free travel has been reduced to 1" or less.

To adjust the clutch pedal, remove clevis pin (1) and turn adjustable yoke (2).

## Propeller Shaft and Universal Joints

Disassembly can be made at either the front or the rear section of the joint by merely removing the four screws holding the yoke and trunnion bearings.

It is extremely important that the individual trunnion bearings be reassembled on the same journals from which they were originally removed, and it is advisable to wire them in place while other service operations are being performed.

*CAUTION:* In reassembling complete assemblies, be sure that the splined stub is entered in the slip yoke so as to bring the trunnions of the yoke on rear end of shaft parallel with the trunnions of the slip yoke on the front joint. If this is not done a rough and unsatisfactory performing joint will result.

## Chassis Springs

Spring breakage can be materially reduced by proper loading, keeping spring "U" bolts and clips tight and lubricating spring leaves and shackle pins freely. Examine the spring "U" bolts and rebound clips and tighten the nuts periodically.

## Front Wheel Bearing Adjustment

Jack up wheels. Remove hub cap and front wheel grease cap. Pull cotter pin and tighten wheel bearing adjusting nut until wheel binds slightly, rotating wheel at the same time to make sure that all surfaces are in proper contact. Back nut off one castellation from the cotter pin hole, which assures sufficient looseness. Install new cotter pin and fasten securely.

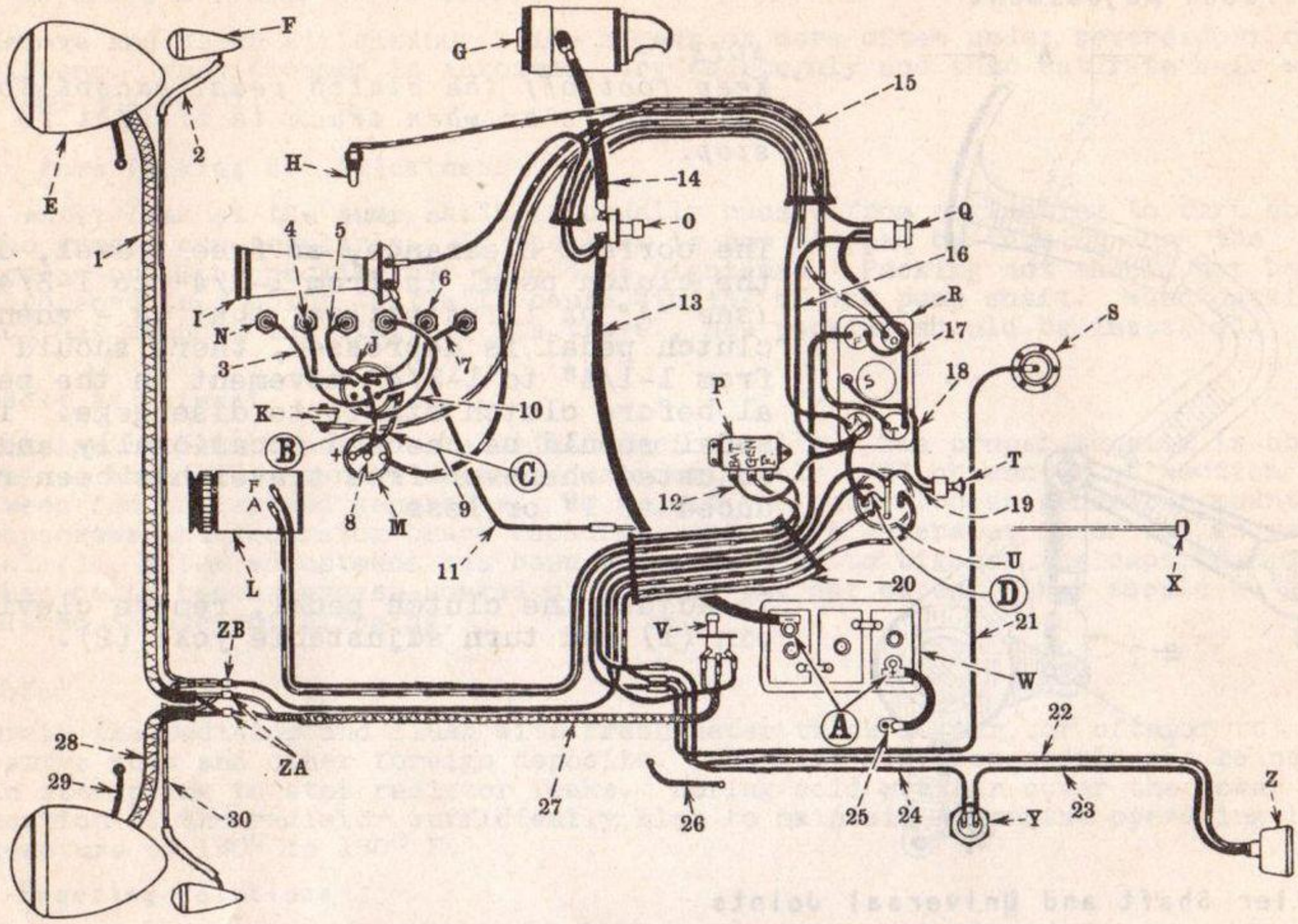
## Rear Wheel Bearing Adjustment

Jack up wheels. Remove hub cap and axle shaft. Remove wheel bearing outer nut and lock. Tighten inner nut until wheel binds slightly rotating wheel at the same time to make sure that all surfaces are in proper contact. Back off inner-nut about one sixth turn and insert lock. Replace outer nut and tighten securely.

---

☞ *Be sure brakes are not dragging, before making bearing adjustments.*

## WIRING DIAGRAM




*When ordering, always use IHC Part Nos. except on Delco-Remy units marked thus ▲ which should be ordered by Delco-Remy Nos. from an authorized United Motors Service Branch.*

| Ref. No. on Illustration | IHC Part No. | Ref. Letter on Illustration | IHC Part No. | Delco-Remy No. | Description |
|---|---|---|---|---|---|
| | CABLES | A | 26375 H | ..... | Terminal (positive). |
| | | | 26376 H | ..... | Terminal (negative). |
| 1 | 90364 HY | B | 38707 HX | ..... | High tension cable. |
| 2 | *92115 HX | C | 90030 HY | ..... | Low tension cable. |
| | □92116 HX | D | 10815 VA | ..... | Fuse. |
| 3 | 32333 HX | E | 90354 H | ..... | Sealed beam head lamp. |
| 4 | 22836 VX | F | 90353 H | ..... | Parking lamp (on fenders). |
| 5 | 22836 VX | G | 62918 H | ▲ 737-Z | Starting motor. |
| 6 | 22836 VX | H | 85615 H | ..... | Temperature gauge (engine unit). |
| 7 | 32333 HX | I | 46970 HA | ▲K-16-903 | Horn. |
| 8 | 38707 HX | J | 54834 HA | ▲ 623-G | Distributor. |
| 9 | 90030 HY | K | 84779 HA | ..... | Oil pressure gauge (engine unit). |
| 10 | 22836 VX | | | | |
| 11 | 90031 HY | L | 90424 H | ▲1102674 | Generator (less fan and pulley). |
| 12 | 88107 HY | M | 90346 H | ▲1115103 | Ignition coil. |
| 13 | 90918 HZ | N | 30673 H | ..... | Spark plug (AC-A6). |
| 14 | 90301 HY | O | 64931 H | ▲ 405-C | Starting switch. |
| 15 | 90491 HA | P | 89175 H | ▲1118208 | Voltage and current regulator. |
| | Harness,cp. | Q | 50212 HA | ▲1997712 | Ignition switch. |
| 16 | 63530 HA | R | 87164 H | ..... | Instrument cluster. |
| 17 | 63536 H | S | 63483 HA | ..... | Fuel gauge (tank unit). |
| 18 | 66568 HX | T | 67262 HX | ..... | Instrument lamp switch. |
| 19 | 90040 HY | U | 36614 HB | ▲1994011 | Lighting switch. |
| 20 | 89409 HA | V | 84142 H | ▲1997003 | Dimmer switch. |
| | Harness,cp. | W | ..... | ..... | Battery. |
| 21 | 90037 HY | X | 68024 HA | ..... | Horn button (on wheel). |
| 22 | 90035 HX | Y | 84717 H | ..... | Stop lamp switch. |
| 23 | 90033 HX | Z | 50004 H | ..... | Stop and tail lamp. |
| 24 | 86860 HY | ZA | 90546 H | ..... | Cable connector. |
| 25 | 90297 HY | ZB | 91844 H | ..... | Cable connector. |
| 26 | 86880 HY | ... | 10224 H | ..... | Generator mounting screw. |
| 27 | 90367 HY | ... | 54833 H | ..... | Generator rear support. |
| 28 | 90361 HY | ... | 57828 H | ..... | Generator rear support screw. |
| 29 | 90420 HY | ... | 90425 H | ..... | Generator brace. |
| 30 | *92112 HX | | | | |
| | □92114 HX | | | | |

* - for D and DS-35 trucks. □ - for D and DS-40 trucks.

## Brief Instructions Pertaining to Ignition, Starting and Lighting Units

☞ *(See illustration on opposite page)*

These instructions are intended solely to be of assistance to the truck user in the event of trouble while operating or while in service on the road. Any major overhauling or adjustment should be done by experts at United Motors Service Branches or Service Stations, or consult an International Harvester Company Service Station. However, there are times when minor difficulties are encountered and these, as a rule, are due solely to loose connections or defective terminals in the wiring system and may be readily taken care of by observing the following:

***If the engine runs but misses at times, look for:***

WIRING—**(A)** Battery terminal loose or corroded.
**(B)** High tension cable grounded or loosely connected.
**(C)** Low tension cable grounded or loosely connected.

DISTRIBUTOR—Contact points not set right.

SPARK PLUG gap should be from .020″ to .025″. If misfiring is not confined to one cylinder, have coil tested, wiring checked, and distributor inspected. If engine misses regularly on one cylinder, the trouble is usually due to the spark plug in that cylinder being dirty, broken, or improperly adjusted.

***If the starting motor turns the engine but no spark or a weak spark is obtained at the spark plug, look for:***

WIRING—High tension cables leading to spark plugs may be grounded or loosely connected.
**(B)** High tension cable may be grounded or loosely connected.
**(C)** Low tension cable may be grounded or loosely connected.

DISTRIBUTOR—Contact points either do not open or do not close.

IGNITION SWITCH—Does not make contact.

WEAK BATTERY—Starting motor will turn too slowly, also low voltage will give weak spark.

STARTING MOTOR—Turns too slowly. Examine all cable connections between battery and starting motor. Connections must be clean and tight.

***If the starting motor will not turn over or turns over slowly when starting switch is closed, look for:***

BATTERY—Weak or completely discharged. Keep electrolyte 3/8″ above plates in each cell. Use distilled water.

WIRING—Loose or dirty battery connections. See that all cable connections between battery and starting motor are clean and tight.

STARTING SWITCH—Contact points burned or cables loose on terminal posts.

***If ammeter does not show that generator is charging, look for:***

GENERATOR—Commutator and brushes dirty or greasy. To clean use No. 00 sandpaper.

WIRING—Cable connections at relay and ammeter may be grounded or loosely connected. Also check cable connections at starting switch and battery.

REGULATOR—If the trouble is within the regulator unit, the necessary replacements and adjustments should be made by an Authorized Electrical Service Station. This kind of trouble will not usually hinder an operator from reaching a service station for an inspection of the unit.

LIGHTING SWITCH—FUSE

**(D)** A fuse is located on the back side of lighting switch. In case of trouble in the wiring system, examine to see if fuse is burned out. If a new fuse burns out immediately after being installed, have the wiring system thoroughly checked for a loose connection or short in the circuit.

DELCO-REMY UNITS—All electrical units are properly adjusted and inspected before leaving the factory and should not be tampered with.

The Distributor is of the *full-automatic type* and has the condenser incorporated thereon.

The Ignition Coil is of the non-condenser type.

The Starting Motor is the direct drive Bendix Drive type, using a manual type starting switch.

The Generator is of the two brush shunt wound type, controlled by a combination current and voltage regulator. The current and voltage regulator units are mounted on the same base. The units operate independently to maintain the output and voltage within specified limits.

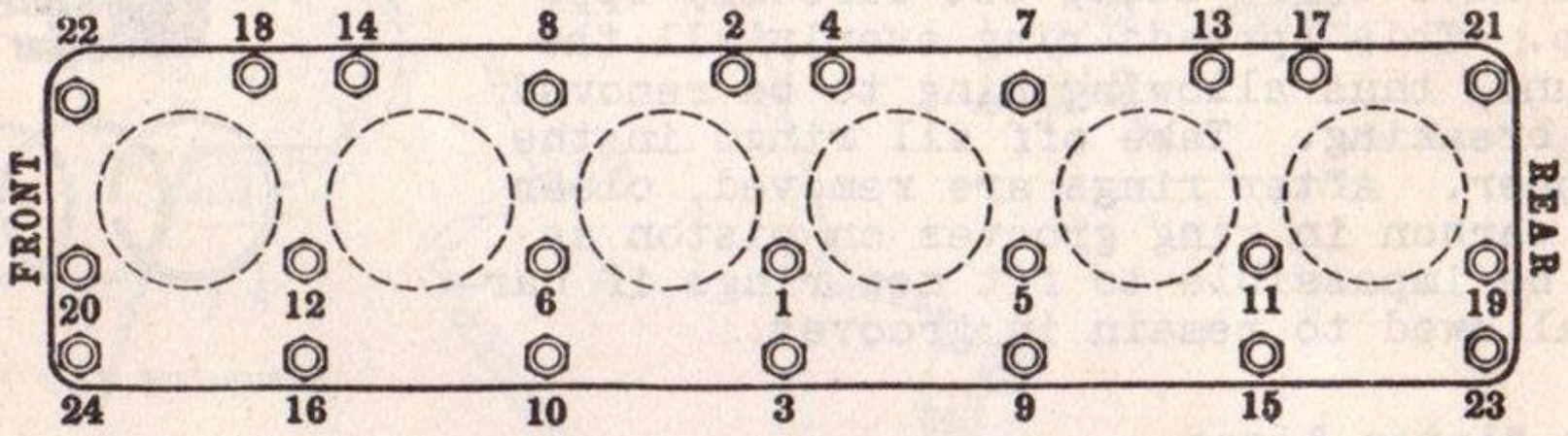
The regulator unit is a delicate instrument and should not be tampered with. If the unit is not operating properly, have it inspected at an Authorized Electrical Service Station.

## Replacing Gasket and Cylinder Head

Carefully inspect gasket for flaws or signs of gas blowing between perforations and see that asbestos is of even thickness throughout.

If gasket shows signs of failure, a new gasket must be used. Whether a new or old gasket is used, it must be covered on both sides with a good grade shellac or suitable sealing compound. After allowing shellac to become semi-dry, carefully place gasket in position on studs with beaded side out as stamped on gasket, and press it down carefully. Be sure no foreign matter is adhering to gasket or to surface of cylinder block. Tighten down nuts in center of head first, working both ways towards the ends as shown in illustration. *This is important and will assure freedom from strains in cylinder head casting.*

After engine has been running a few minutes, tighten nuts down firmly again. (Be sure to fill radiator with clean soft water before starting engine.) Check valve clearance before replacing rocker arm cover.




*When replacing gasket and cylinder head, tighten nuts in the order shown.*

## Adjusting the Connecting Rod Bearings

The work of adjusting the connecting rod bearings should be undertaken only by an expert mechanic in a properly equipped Service Station.

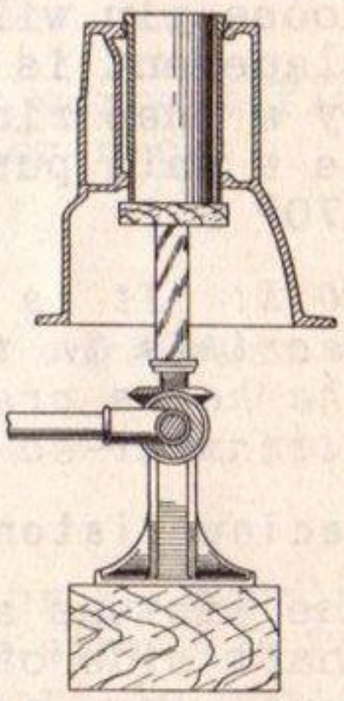
The factory setting for clearance between bearing and crankshaft is .0025". A side clearance of .007" to .013" is allowed.

Connecting rods are fitted with two .006" laminated shims which permit adjustments for bearing wear up to .006". The connecting rod or cap should never be filed; if bearing wear cannot be adjusted by removing shims, it is of *extreme importance* that new bearings be installed.

## Removing Cylinder Sleeves

Remove cylinder head and crankcase oil pan. Remove connecting rod and piston assembly from cylinder bore.

Cylinder sleeve can be forced out of crankcase with the wheel jack by placing two wood blocks in a "T" shaped arrangement on the wheel jack under the sleeve to be removed (see Illustration).



*Removing Cylinder Sleeves*

## Replacing Cylinder Sleeves

When installing new sleeves, be sure that there is no dirt under the sleeve flange or in the grooves in block. Check each cylinder with a piston less rings to determine if there is any distortion or binding as the piston is moved over sleeve surface. When installing sleeves, always use new cylinder sleeve rubber insulators.

*Consult an International Harvester Company Service Station before attempting an overhauling.*

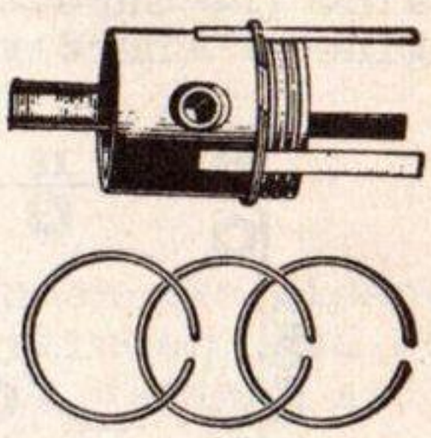
### Removing Pistons

To remove pistons from cylinder block, remove cylinder head and oil pan. With connecting rod cap removed, piston and connecting rod assembly may be pushed out thru top of block.

### Removing Piston Rings

With piston and connecting rod assembly out of the engine, it is easy to remove the piston rings, as follows:

Hold the assembly by clamping the connecting rod in a vise. If it is caught just beneath the piston the vise will prevent the piston from moving while working on it. Place three metal strips under top piston ring, having two strips set a short distance from gap in ring and have third strip set directly opposite gap. This spreads ring evenly all the way around, thus allowing ring to be removed without breaking. Take off all rings in the same manner. After rings are removed, clean out all carbon in ring grooves on piston as it will be impossible to fit new rings if carbon is allowed to remain in grooves.



*Removing the Piston Rings*

### Fitting New Piston Rings

New rings should be fitted into cylinders before trying to place them on the pistons. When fitting new rings in the cylinder, put the piston in the cylinder ahead of the rings. Push the rings against the end of the piston. This will prevent them from being out of square with the cylinder bore and a false reading of the gap clearance will be avoided. When the rings are square, both oil and compression rings should have a gap clearance of .015" (with an allowable variation of .005" smaller or .010" larger). Side clearance between ring and groove in piston should be .0015" to .003" for compression rings and .0005" to .0015" for oil control rings.

### Piston Pins

After removing connecting rod and piston, test the pin for looseness in the piston bosses. A loose pin will cause a knock, in which case replacement is necessary. Pin is held in place by a snap ring at each end. Piston pins should be a palm push fit at normal room temperature (70° F.)

*NOTE: It is very important when reaming the bearings in the piston pin bosses, to see that the holes are reamed smoothly and in perfect alignment so that pin will fit properly.*

*Fitting the Piston Pin*

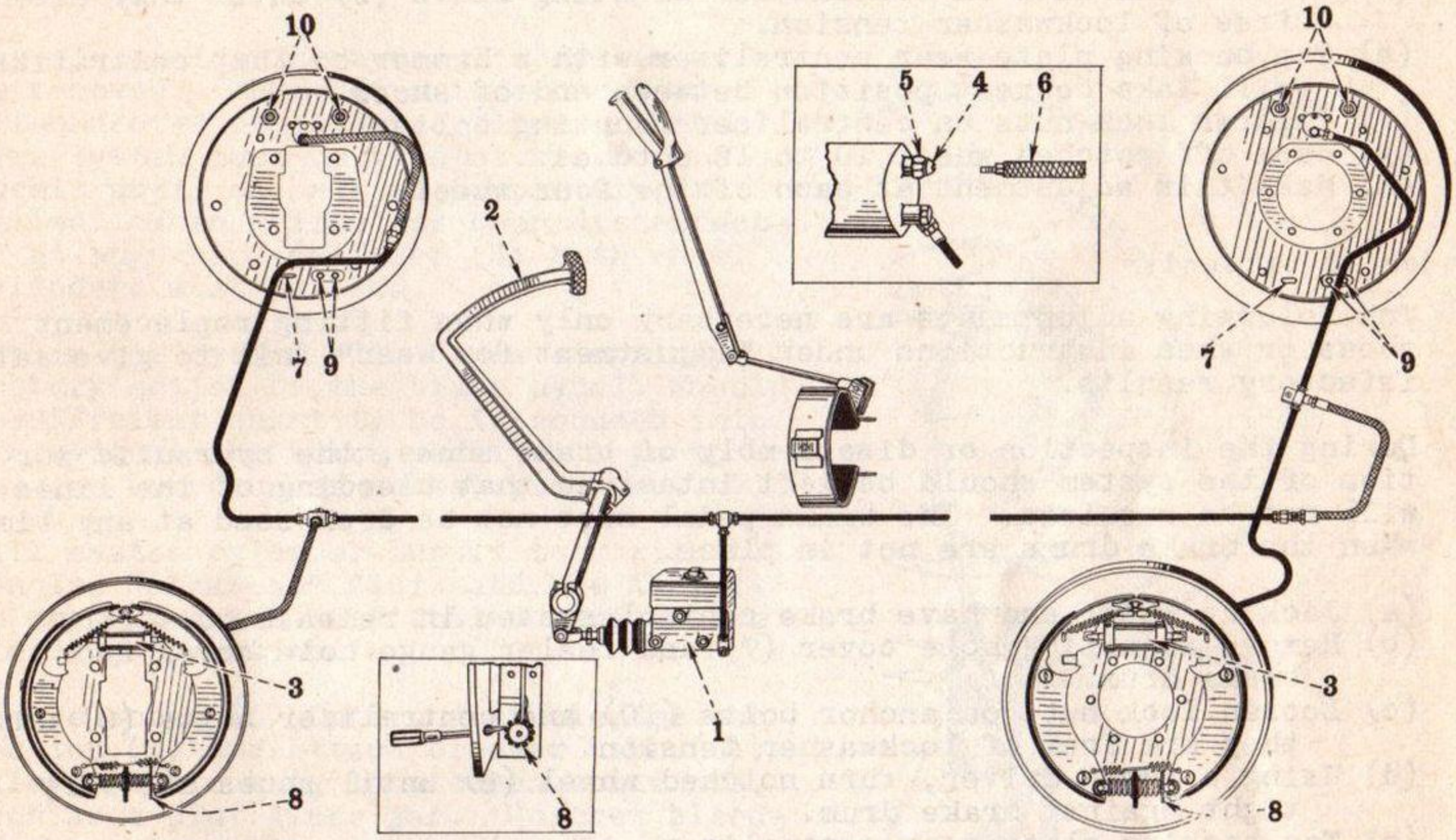
### Replacing Pistons and Connecting Rods

The pistons are slotted and these slots must always be toward the camshaft side of the engine. Also, the connecting rods are offset; therefore, when assembling a piston on a rod, make sure the piston is assembled so that when rod and piston assembly is placed in the engine the slot in piston will be toward the camshaft side of the engine.

The connecting rod bearings are replaceable. These bearings must be installed so as to come flush with the face of the connecting rod and bearing cap at the tongue and groove side. This allows the lower half bearing to extend above the face of the bearing cap on the side opposite from the tongue and groove.

## Care and Adjustment of Hydraulic Brakes

*Never reline the brake shoes. Use "Exchange" replacement shoes with lining assembled and burnished to a perfect circle. This will assure a satisfactory job at a cost comparable with that of relining. When installing new or relined shoes, they should be replaced only in sets. Although it is not recommended, an individual shoe may be replaced. The truck owner should understand that individual shoe replacements are made at his own risk.*




*Always use Genuine "Lockheed" fluid. The use of other than Genuine "Lockheed" fluid or the introduction of mineral base oil into the system will cause rubber parts to swell and become inoperative.*

Inspect master cylinder (1) each one thousand miles for correct fluid level. Fluid should be within 3/8" from bottom of filler neck.

Do not fill supply tank to top of filler neck.

*CAUTION: When removing supply tank filler cap, extreme care must be used to prevent dirt from entering master cylinder.*

### Brake Pedal Adjustment

When brake control system is in release position, foot brake pedal (2) should have 1/4" free travel before the pressure stroke starts. This free travel is required to prevent blocking of bypass port in master cylinder.

Should bypass port become blocked, brakes will drag due to pressure building up in system. Should all brakes drag, pressure may be relieved by removing screw (4) from bleeder (5) and unscrewing bleeder three-quarters of a turn.

Foot brake pedal should travel approximately 1½" to 2½" to apply the brakes, if shoe clearance is correct.

☞ *Keep all lubricant and brake fluid away from brake lining.*

## Care and Adjustment of Hydraulic Brakes - Continued

*(See illustration on page 17).*

### Adjustment for Wear

(a) Jack up wheel and have brake control system in release position.
(b) Remove adjusting hole cover (7).
(c) Using a screw driver, turn notched wheel (8) until brake shoes are solidly against brake drum.
(d) Loosen lock nuts on centralizer mounting bolts (9) until they are free of lockwasher tension.
(e) Tap backing plate near centralizer with a hammer so that centralizer will take correct position between end of shoes.
(f) Tighten lock nuts on centralizer mounting bolts.
(g) Back off notched wheel 10 to 12 notches.
(h) Make this adjustment at each of the four wheels.

### Major Adjustments

The following adjustments are necessary only when fitting replacement shoes or when instructions under "Adjustment for Wear" fail to give satisfactory results.

During the inspection or disassembly of brake shoes, the hydraulic portion of the system should be left intact so that bleeding of the lines will not be required. The brake pedal must not be depressed at any time when the brake drums are not in place.

(a) Jack up wheel and have brake control system in release position.
(b) Remove adjusting hole cover (7) and feeler gauge hole cover from brake drum.
(c) Loosen lock nuts on anchor bolts (10) and centralizer bolts (9) until they are free of lockwasher tension.
(d) Using a screw driver, turn notched wheel (8) until shoes are very tight against brake drum.
(e) Tap backing plate near centralizer with a hammer so that centralizer will take correct position between end of shoes.
(f) Tighten centralizer bolt nuts.
(g) Back off notched wheel until brake drum is free of brake drag.
(h) Check the secondary (rear) shoe lining to drum clearance with a .010" feeler gauge, and if there is more than .002" variation between the adjusting screw end and the anchor pin end, it will be necessary to change the position of the eccentric anchor pin (pin marked with arrow) as follows:
(i) Turn eccentric anchor pin and adjust the notched wheel until .010" lining to drum clearance is obtained at each end of the secondary shoe.
(j) Tighten anchor bolt nuts as tight as possible with a 16" wrench taking care not to change the position of the eccentric bolt.
(k) Turn notched wheel until shoes are solidly against brake drum.
(l) Again loosen lock nuts on centralizer mounting bolts, tap backing plate with hammer and then tighten centralizer bolt nuts.
(m) Back off notched wheel 10 to 12 notches.
(n) Make this adjustment at each of the four wheels.

*Consult an International Harvester Company Service Station before attempting a general overhauling or when any mechanical difficulties occur.*

☞ *Keep all lubricant and brake fluid away from brake lining.*

CARE AND ADJUSTMENT OF HYDRAULIC BRAKES - Continued

*(See Illustration on page 17)*

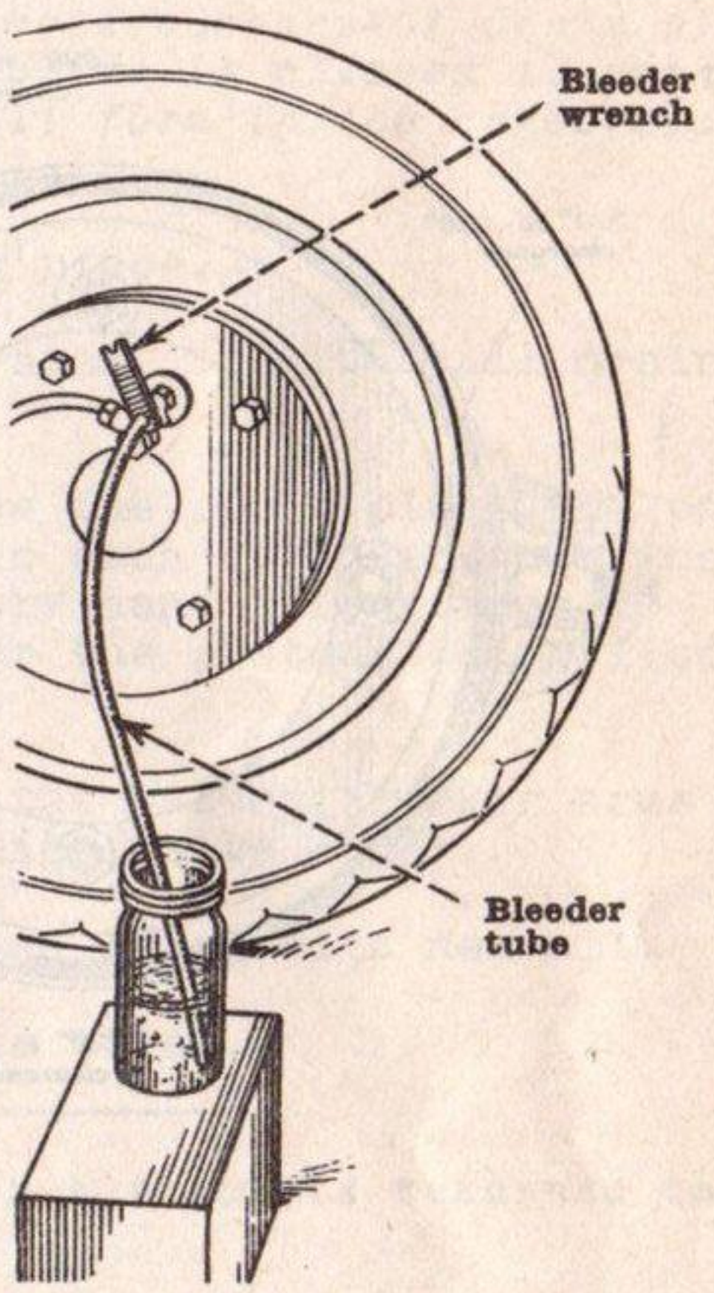
**Bleeding the Lines**

Any air inside the hydraulic system must be removed. Whenever a line has been disconnected at master cylinder, the entire system must be bled at all four wheels until all air is completely expelled. When a line has been disconnected at any wheel cylinder (3) both wheel cylinders must be bled.

Air in the system will cause a springy, rubbery action of the brake pedal. Should a sufficient quantity be introduced into the system, the brake pedal will go to the toe board under normal pressure.

Fill master cylinder supply tank with Genuine "Lockheed" fluid and see that it is kept at least half full during entire bleeding operation.

Remove screw (4) from end of bleeder connection (5) and attach bleeder tube (6). Allow tube to hang in a clean container, such as a pint glass jar. Unscrew bleeder connection three-quarters of a turn and depress brake pedal by hand, allowing pedal to return slowly. Pumping brake pedal forces fluid out into glass jar and carries with it any air which might be present in the system.




Watch flow of fluid from tube, the end of which should be kept below surface of fluid in glass jar, and when all air bubbles cease to appear or when stream is a solid fluid mass, close bleeder connection.

Fluid withdrawn in "bleeding" operation should not be used again.

Fluid should be replenished in supply tank after each cylinder is bled. Should supply tank be drained during bleeding operation, air will enter the system and rebleeding will then be necessary.

## Important Instructions for Storing a Truck

**When a truck is not to be used for a period of time, it should be placed in a dry and protected place and the following procedure should be observed:**

1. Wash the truck and completely lubricate the chassis (refer to lubrication chart).

2. Drain the engine oil, flush system and refill with new oil. Run the engine until the oil is thoroughly circulated.

3. *CAUTION: Drain the fuel tank, fuel lines, fuel pump and carburetor. Run engine until carburetor is dry. Remove carburetor drain plug and drain the fuel filter bowl. If gasoline is allowed to remain in the fuel system a gummy substance will form in the carburetor jets and passages causing serious trouble.*

4. Remove storage battery and put in a dry place.

5. Drain and flush radiator and cooling system. BE SURE all drain cocks are open.

6. After the engine has become cold, remove the spark plugs and pour a small quantity of SAE-50 engine oil in each cylinder thru the plug holes. Then turn the engine over by hand a few times to thoroughly distribute the heavy oil over the pistons and cylinder walls. BE SURE to replace spark plugs.

   Remove the valve cover plate and flush the valves, rocker arms and push rods with SAE-50 engine oil. Replace valve cover.

7. Clean air cleaner and refill to indicated level with new oil.

8. Block up truck so that weight is off the tires.

---

**The following procedure should be followed when a truck is returned to service:**

1. Close drain cocks and fill cooling system with water (use anti-freeze if required). Check all hose and water pump connections for water leaks.

2. Fill fuel tank and check condition of fuel filter glass bowl gasket. Gasket must form a good seal or pump will not supply fuel to carburetor.

3. Install storage battery (see page 13 for battery maintenance instructions).

4. Check level of oil in air cleaner.

5. Check oil level in engine. Remove spark plugs and pour a small quantity of light engine oil in each cylinder thru spark plug holes. Turn engine over by hand a few times and then replace spark plugs. Remove valve cover and flush the valves, rocker arms and push rods with light engine oil.

6. Check oil level in transmission, rear axle and any auxilliary unit.

7. Check air pressure in all tires.

# LUBRICATION CHART

**Paragraphs are numbered to correspond with numbers in illustration on opposite page.**

| | |
|---|---|
| 1. Engine oil (check daily) | Keep engine oil to proper level. When oil becomes dirty or thin, drain and refill with new high grade oil (capacity is 6½ quarts, U.S.) Note:- Cold weather requires new oil more often because of using choke, which thins the oil.<br><br>The selection of a winter engine oil should be based on the lowest anticipated atmospheric temperature, while the selection of a summer oil should be based on the highest temperature expected during the day.<br><br>Temperatures above 90 degrees (F.)<br>Moderate service . . . . . SAE-30 or 40<br>Severe or high speed service . . . SAE-40 or 50<br>Temperatures down to 32 degrees above zero (F.) . . . . . SAE-30<br>Temperatures down to 10 degrees above zero (F.) . . . . . SAE-20W<br>Temperatures down to 10 degrees below zero (F.) . . . . . SAE-10W |

## Every 500 Miles

| | |
|---|---|
| 2. Water Pump | Fill grease cup with a good grade of WATER PUMP GREASE and turn down one-half turn. |

## Every 500 to 1000 Miles

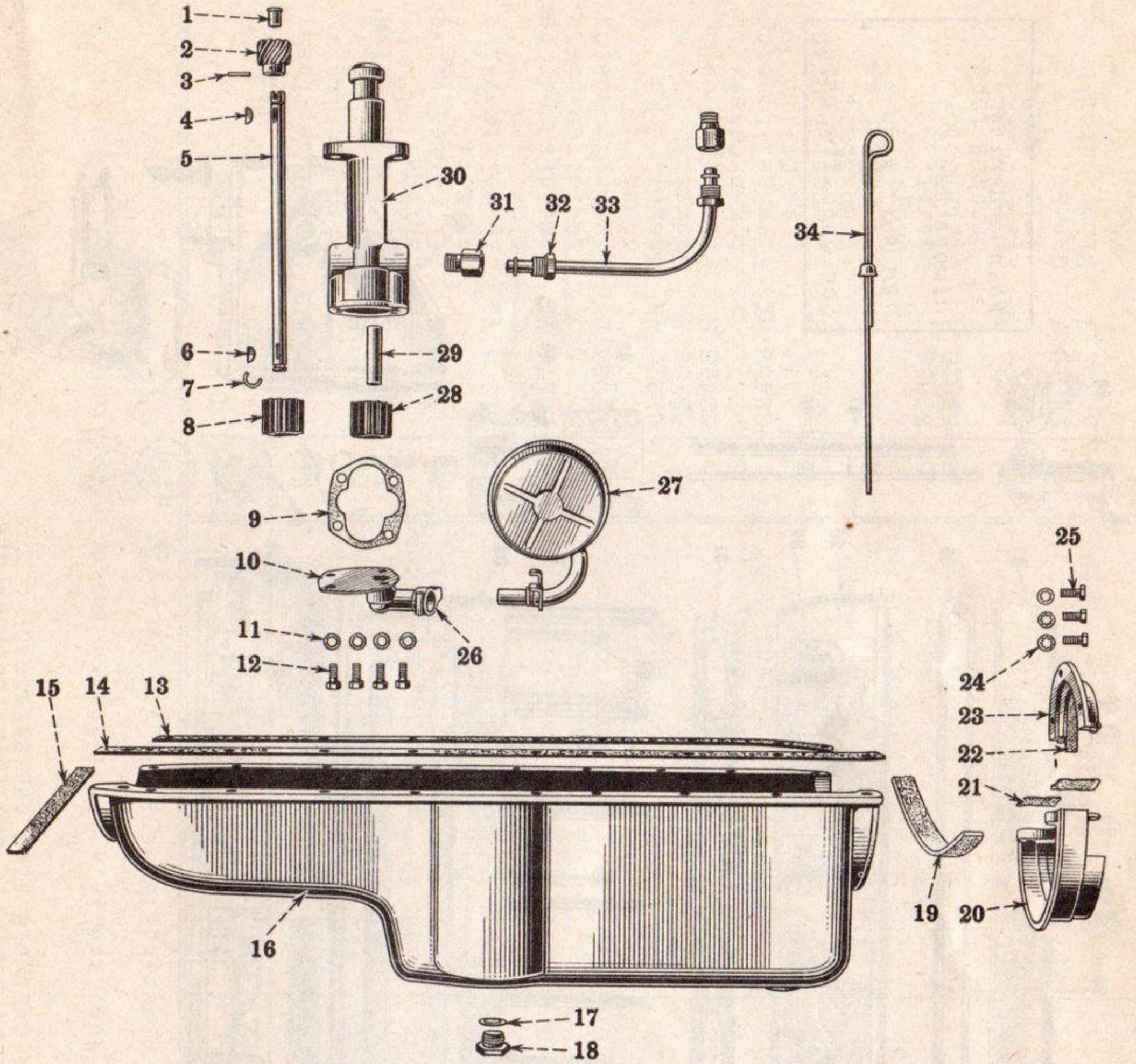
| | |
|---|---|
| 3. Fan Hub. | Remove pipe plug, insert pressure gun fitting and fill with WHEEL BEARING GREASE. Replace plug. |
| 4. Spring Pins.<br>5. Clutch Pedal<br>6. Clutch Release Fork Shaft.<br>7. Steering Knuckle (Upper & Lower)<br>8. Tie Rod Ends<br>9. Drag Link Ball Joints.<br>10. Rear Axle Gear Shift Relay Lever (DS-40 only). | Use a VISCOUS CHASSIS LUBRICANT or SAE-140 GEAR OIL. |
| 11. Propeller Shaft Universal Joints<br>12. Propeller Shaft Slip Joint<br>13. Rear Axle Gear Shift Rod Ball Joint (DS-35 and DS-40 only). | Use a VISCOUS CHASSIS LUBRICANT or SAE-140 GEAR OIL. Remove pipe plug, insert pressure gun fitting and fill with lubricant. Replace plug. |
| 14. Propeller Shaft Center Bearing | Use a VISCOUS CHASSIS LUBRICANT. |
| 15. Generator.<br>16. Starting Motor | 4 to 5 drops of light ENGINE OIL in oilers. |
| 17. Distributor. | Fill grease cup with a VISCOUS CHASSIS LUBRICANT and turn down one turn. Apply one drop of light ENGINE OIL to breaker arm pivot and to felt wick under rotor. Apply a light coat of VASELINE to breaker arm rubbing block. |
| 18. Steering Gear. | Use GEAR OIL. Remove pipe plug and inspect oil level every 1000 miles. Keep housing full of oil. Replace plug. |
| 19. Transmission — Capacity D-35 or DS-35 is 5½ pints-U.S. . . . . <br>Capacity D-40 or DS-40 is 14 pints-U.S. . . . . | Use GEAR OIL. Inspect every 1000 miles and keep oil up to level of filler plug. Drain and refill with new oil every 10,000 miles. For the transmission, also for D-35 and D-40 differentials use SAE-140 for warm climate and SAE-90 for cold climate. For DS-35 and DS-40 differentials, drain thoroughly, flush and use E.P. lubricant having 140 viscosity for warm clime and 90 viscosity for cold climate. |
| 20. Differential — Capacity D-35 or DS-40 is 10 pints-U.S. . . . . <br>Capacity DS-35 is 14 pints-U.S.<br>Capacity DS-40 is 18 pints-U.S. | |

## Every 10,000 Miles

| | |
|---|---|
| 21. Front Wheel Bearings<br>22. Rear Wheel Bearings. | Remove wheels, clean hubs and repack with SHORT FIBER WHEEL BEARING GREASE. |
| 23. Booster Brake Cylinder | Remove pipe plug in cylinder front end plate and inject 2 ounces of Bendix Vacuum Cylinder Oil, obtainable at any Bendix B K Distributor or Service Station. Be sure to replace pipe plug. (For trucks with trailer connections, remove control hose at cylinder front end plate). |

ENGINE { IHC Model FAB-241 — 3-3/8 x 4-1/2" (D-35, DS-35)
IHC Model FAB-259 — 3-1/2 x 4-1/2" (D-40, DS-40)

## OIL PUMP, OIL FLOAT, OIL LEVEL GAUGE, OIL PAN.




*Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.*

| Ref. No. | IHC Part No. | | Ref. No. | IHC Part No. | | Ref. No. | IHC Part No. | |
|---|---|---|---|---|---|---|---|---|
| 1 | 54658 H | Guide. | 12 | Q 4012 | Capscrew. | 25 | ..... | Capscrew, 5/16 x 5/8" |
| 2 | 16112 D | Gear, 10 teeth. | 13 | 35692 H | Gasket, right. | 26 | 60884 H | Bracket. |
| 3 | 13921 H | Pin. | 14 | 35691 H | Gasket, left. | 27 | 1931 YA | Oil float. |
| 4 | 7699 TM | Key. | 15 | 35638 HA | Gasket, front. | 28 | 35631 H | Idler gear, 13 teeth. |
| 5 | 54837 H | Pump drive shaft. | 16 | 35718 HDY | Oil pan. | 29 | 35647 H | Idler shaft. |
| 6 | 7699 TM | Key. | 17 | 3405 H | Gasket. | 30 | 35705 HAX | Oil pump body. |
| 7 | 27999 H | Gear retainer. | 18 | 41300 HA | Drain plug. | 31 | 39754 H | Half union. |
| 8 | 35630 H | Gear, 13 teeth. | 19 | 35639 HA | Gasket, rear. | 32 | 39440 H | Nut. |
| 9 | 35628 H | Gasket. | 20 | 61999 H | Oil retainer (lower half). | | 39441 H | Sleeve. |
| 10 | 60871 HX | Cover plate. | 21 | 35636 HB | Gasket. | 33 | 39576 HA | Outlet pipe. |
| 11 | ..... | Lockwasher, 5/16". | 22 | 33688 H | Felt. | 34 | 62518 VAX | Oil level gauge. |
| | | | 23 | 35707 HA | Oil retainer (upper half). | | | |
| | | | 24 | 22891 D | Lockwasher. | | | |

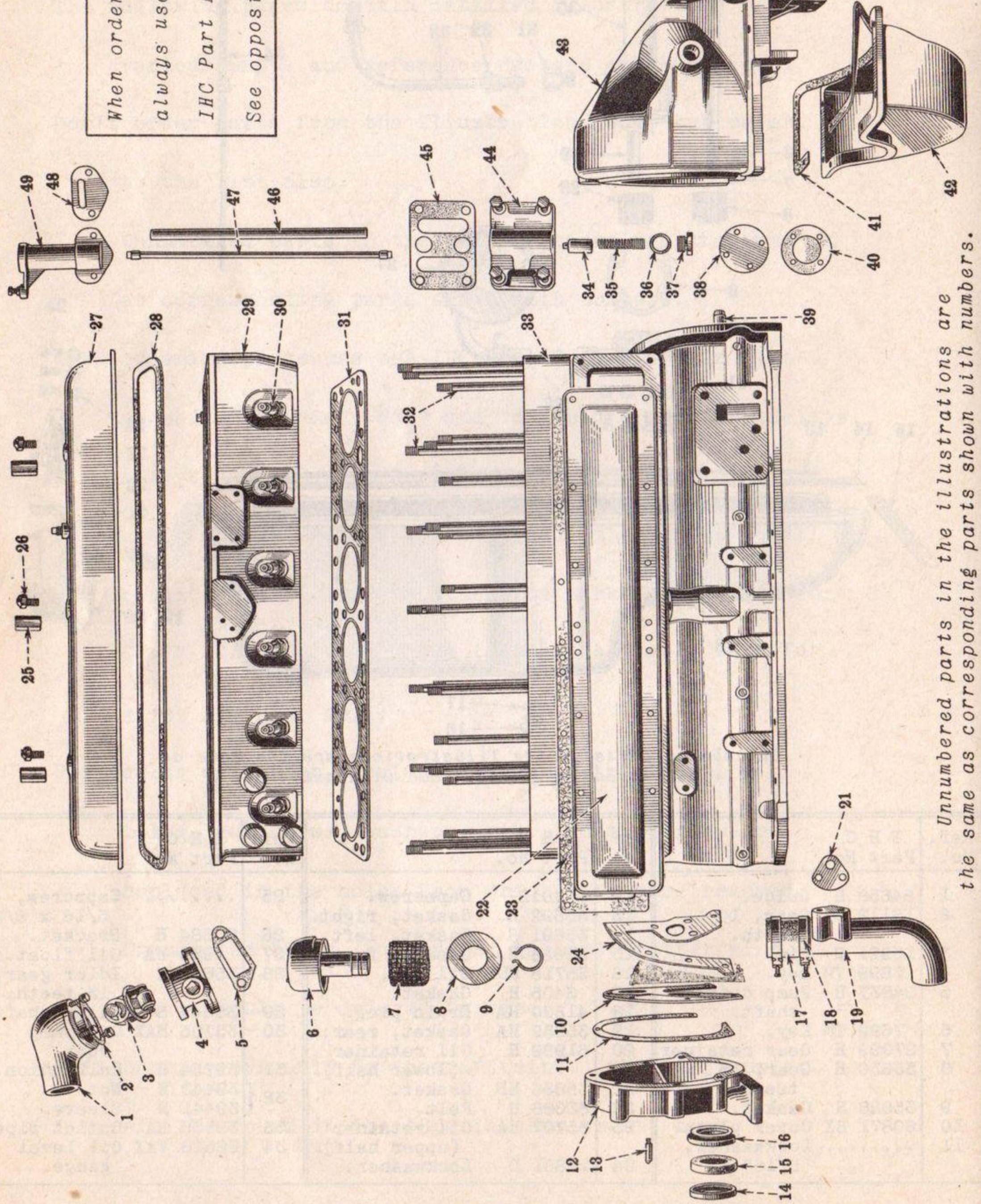
*When ordering, always use IHC Part Nos.*

*Don't order parts from the illustrations only; refer to the list also.*

ENGINE { IHC Model FAB-241 - 3-3/8 x 4-1/2" (D-35, DS-35)
IHC Model FAB-259 - 3-1/2 x 4-1/2" (D-40, DS-40)

*When ordering always use IHC Part Nos. See opposite page.*

## CYLINDER HEAD AND CRANKCASE




*Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.*

## CYLINDER HEAD AND CRANKCASE

Index to Reference Nos. appearing in illustration on opposite page.

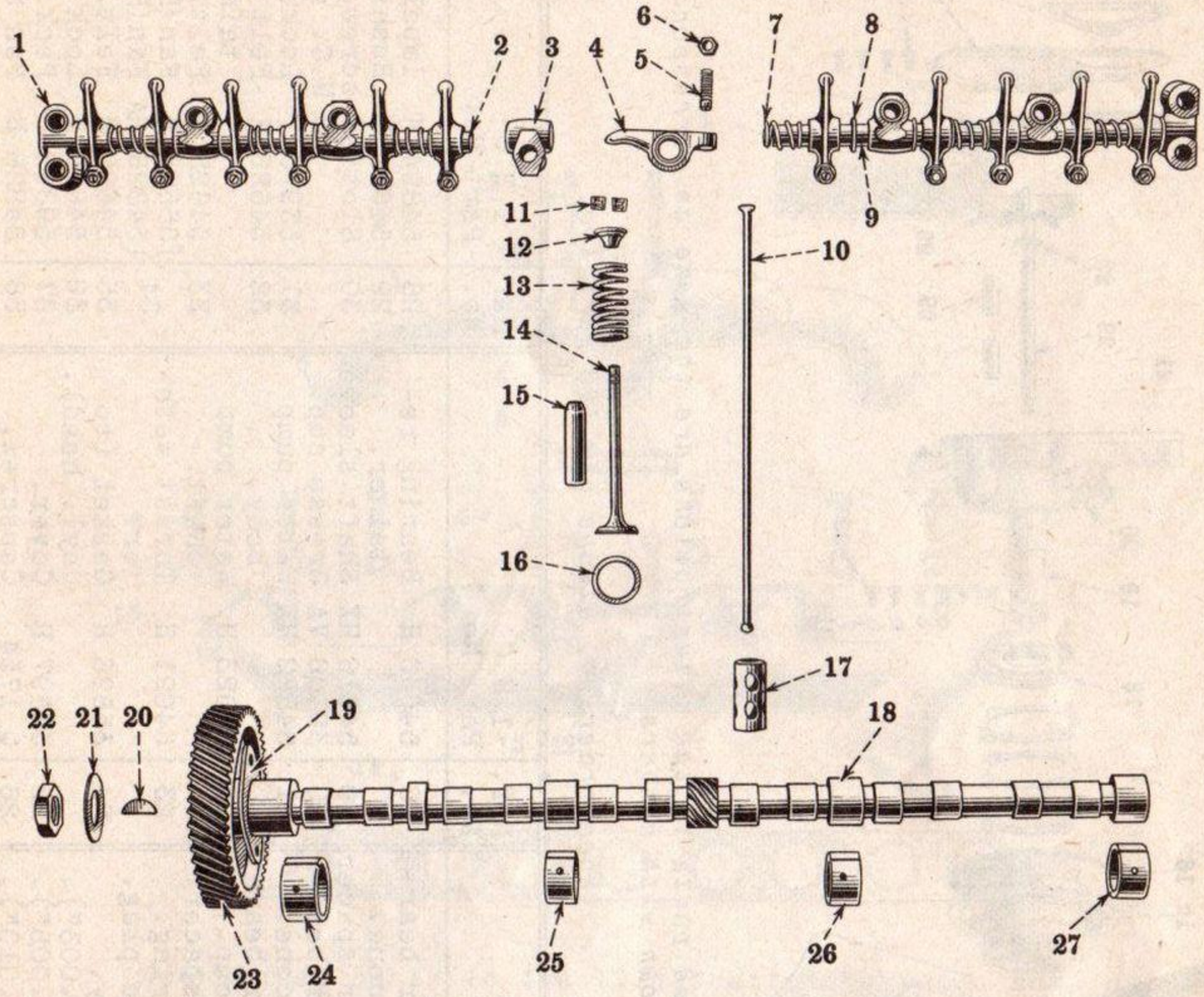
*When ordering, always use IHC Part Nos.*

| Ref. No. | IHC Part No. | | Ref. No. | IHC Part No. | | Ref. No. | IHC Part No. | |
|---|---|---|---|---|---|---|---|---|
| 1 | 50969 HA | Water outlet (FAB-241) | 17 | 35916 H | Water inlet hose. | 33 | 54815 HDY | Crankcase, less main bearings. |
| | 60876 H | Water outlet (FAB-259) | 18 | 39205 H | Water inlet hose clamp. | 34 | 41310 H | Oil relief valve. |
| 2 | 35665 H | Gasket. | 19 | 35912 HA | Water inlet. | 35 | 49946 H | Oil relief valve spring. |
| 3 | 50968 H | Thermostat (145° to 150°). | 21 | 35895 H | Water inlet gasket. | 36 | 3405 H | Oil relief valve gasket. |
| 4 | 87180 H | Water outlet, lower. | 22 | 35704 HA | Valve lifter rod cover. | 37 | 61263 VA | Oil relief valve plug. |
| 5 | 35652 H | Gasket - water outlet. | 23 | 35703 HA | Gasket. | 38 | 62274 VA | Camshaft rear bearing cover plate. |
| 6 | 30591 HAY | Oil filler cap. | 24 | 35701 H | Gasket. | 39 | 16023 D | Flywheel housing dowel. |
| 7 | 36482 H | Oil filler screen. | 25 | 35640 H | Cyl. head cover spacer nut. | 40 | 62275 VA | Gasket. |
| | 36484 HA | Oil filler filter element. | 26 | 35666 H | Cyl. head cover capscrew. | 41 | 63306 H | Gasket. |
| 8 | 36483 H | Oil filler screen retainer. | 27 | 35716 HX | Cylinder head cover. | 42 | 62458 H | Flywheel housing lower cover. |
| 9 | 36481 H | Oil filler retainer snap ring. | 28 | 35694 H | Gasket. | 43 | 62459 HX | Flywheel housing (FAB-241). |
| 10 | 54830 H | Gear case cover plate. | 29 | 64167 HDX | Cylinder head, less valves. | | 62460 HX | Flywheel housing (FAB-259). |
| 11 | 54831 H | Gasket. | | 35712 HJY | Cylinder head, with valves. | 44 | 41311 HA | Oil relief valve body. |
| 12 | 81391 H | Gear case cover. | 30 | 30673 H | Spark plug, AC-A6. | 45 | 35654 H | Gasket. |
| 13 | 66275 H | Timing indicator pin. | | 3405 H | Gasket. | 46 | 54816 H | Distributor bracket tube. |
| 14 | 81385 H | Front retainer for fan pulley felt. | 31 | 35702 H | Cylinder head gasket. | 47 | 54835 HA | Distributor drive shaft. |
| 15 | 81386 H | Felt for fan drive pulley. | 32 | 35641 HB | Cylinder head oil stud. | 48 | 54819 H | Gasket. |
| 16 | 36199 HAX | Rear retainer for fan pulley felt. | | 35642 H | Stud, 1/2 x 6-1/4". | 49 | 54818 H | Distributor bracket. |
| | | | | 35643 H | Stud, 1/2 x 6-7/8". | | | |
| | | | | 35644 H | Stud, 1/2 x 7-19/32". | | | |

73179 HB - Package - Gasket Overhaul Set for Cylinder Head.
73172 HA - Package - Gasket Overhaul Set for Lower Crankcase.

ENGINE { IHC Model FAB-241 - 3-3/8X4-1/2" (D-35, DS-35)
IHC Model FAB-259 - 3-1/2X4-1/2" (D-40, DS-40)

## ROCKER ARMS, SHAFTS, VALVES, TAPPETS, RODS, CAMSHAFT




*Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.*

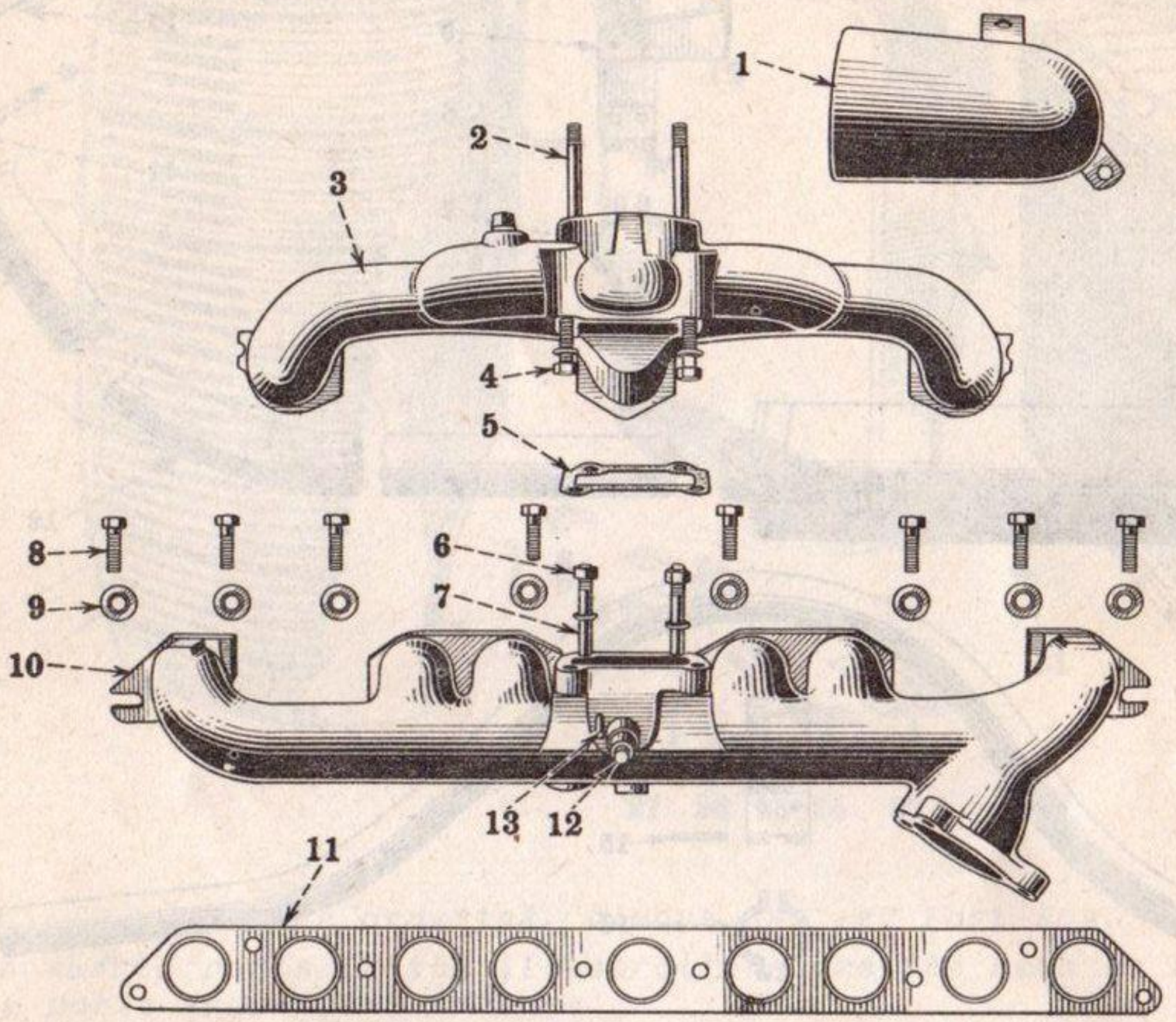
| Ref. No. | I H C Part No. | | Ref. No. | I H C Part No. | |
|---|---|---|---|---|---|
| 1 | 35664 HAX | Rocker arm end bracket. | 16 | 52940 VA | Valve seat insert (Exhaust)(standard). |
| 2 | 51460 HX | Front shaft. | | 61012 VB | Valve seat insert (Intake)(standard). |
| 3 | 35663 H | Intermediate bracket. | 17 | 35645 H | Valve tappet (standard). |
| 4 | 35622 HDX | Rocker arm (exhaust). | 18 | 35714 HB | Camshaft. |
| | 36604 HEX | Rocker arm (intake). | 19 | 35650 H | Thrust flange. |
| 5 | 16067 D | Adjusting screw. | 20 | 13711 D | Key. |
| 6 | 38763 H | Check nut. | 21 | 16025 D | Nut retainer. |
| 7 | 35619 H | Spring. | 22 | 16026 D | Nut. |
| 8 | 35621 H | Spacer. | 23 | 39381 HB | Gear, 54 teeth. |
| 9 | 51459 HX | Rear shaft. | 24 | 37180 H | Front bearing. |
| 10 | 35646 H | Valve lifter rod. | | 37173 H | Front bearing (Export). |
| 11 | 33896 H | Retainer lock. | 25 | 37177 H | Second bearing. |
| 12 | 35618 HC | Retainer. | | 37176 H | Second bearing (Export). |
| 13 | 35620 HC | Valve spring. | 26 | 37178 H | Third bearing. |
| 14 | 38002 HA | Exhaust valve. | | 37175 H | Third bearing (Export). |
| | 64168 H | Intake valve. | 27 | 37179 HA | Rear bearing. |
| 15 | 38607 HA | Valve stem guide. | | 37174 HA | Rear bearing (Export). |
| | | | ... | 75941 H | Valve spring damper. |

*When ordering, always use IHC Part Nos.*

*Don't order parts from the illustrations only; refer to the list also.*

ENGINE {IHC Model FAB-241 - 3-3/8 x 4-1/2" (D-34, DS-35)
IHC Model FAB-259 - 3-1/2 x 4-1/2" (D-40, DS-40)

## INTAKE AND EXHAUST MANIFOLDS

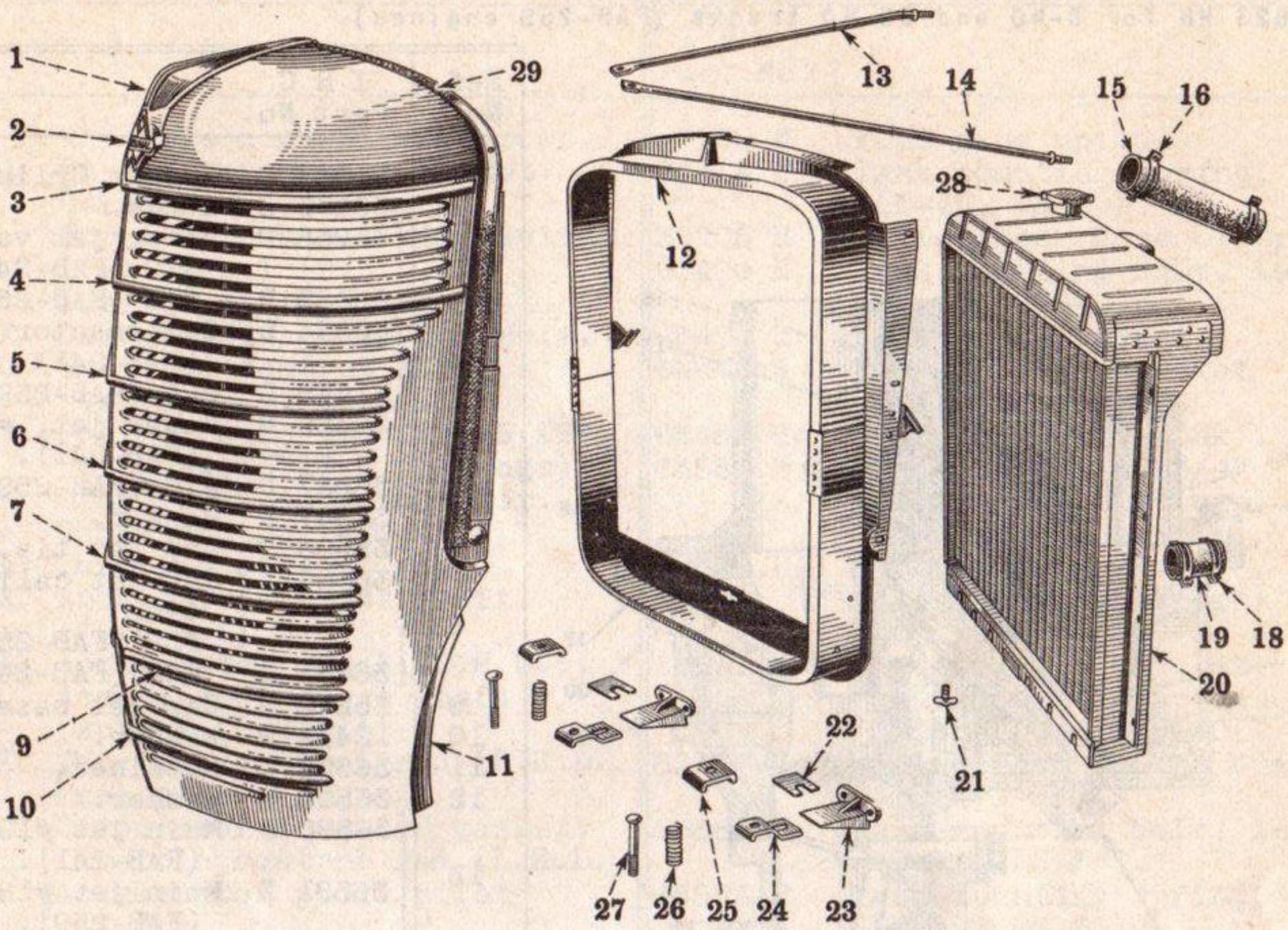



*Unnumbered parts in the illustrations are the same as corresponding parts shown with number.*

*When ordering, always use IHC Part Nos.*

| Ref. No. | I H C Part No. | |
|---|---|---|
| 1 | 37688 HAX | Shield for intake manifold. |
| 2 | 21748 VA | Stud. |
| 3 | 35812 HC | Intake manifold. |
| 4 | Q 1806 | Capscrew. |
| 5 | 35659 H | Gasket. |
| 6 | - - - - - - | Hex. nut, 3/8" - 24 N.C. |
| 7 | 21748 VA | Stud. |
| 8 | Q 1804 | Capscrew. |
| 9 | 16135 DA | Washer. |
| 10 | 74597 HAX | Exhaust manifold. |
| 11 | 35695 HA | Gasket. |
| 12 | 84287 H | Plug. |
| 13 | 42147 HA | Pin. |

## RADIATOR AND CONNECTIONS



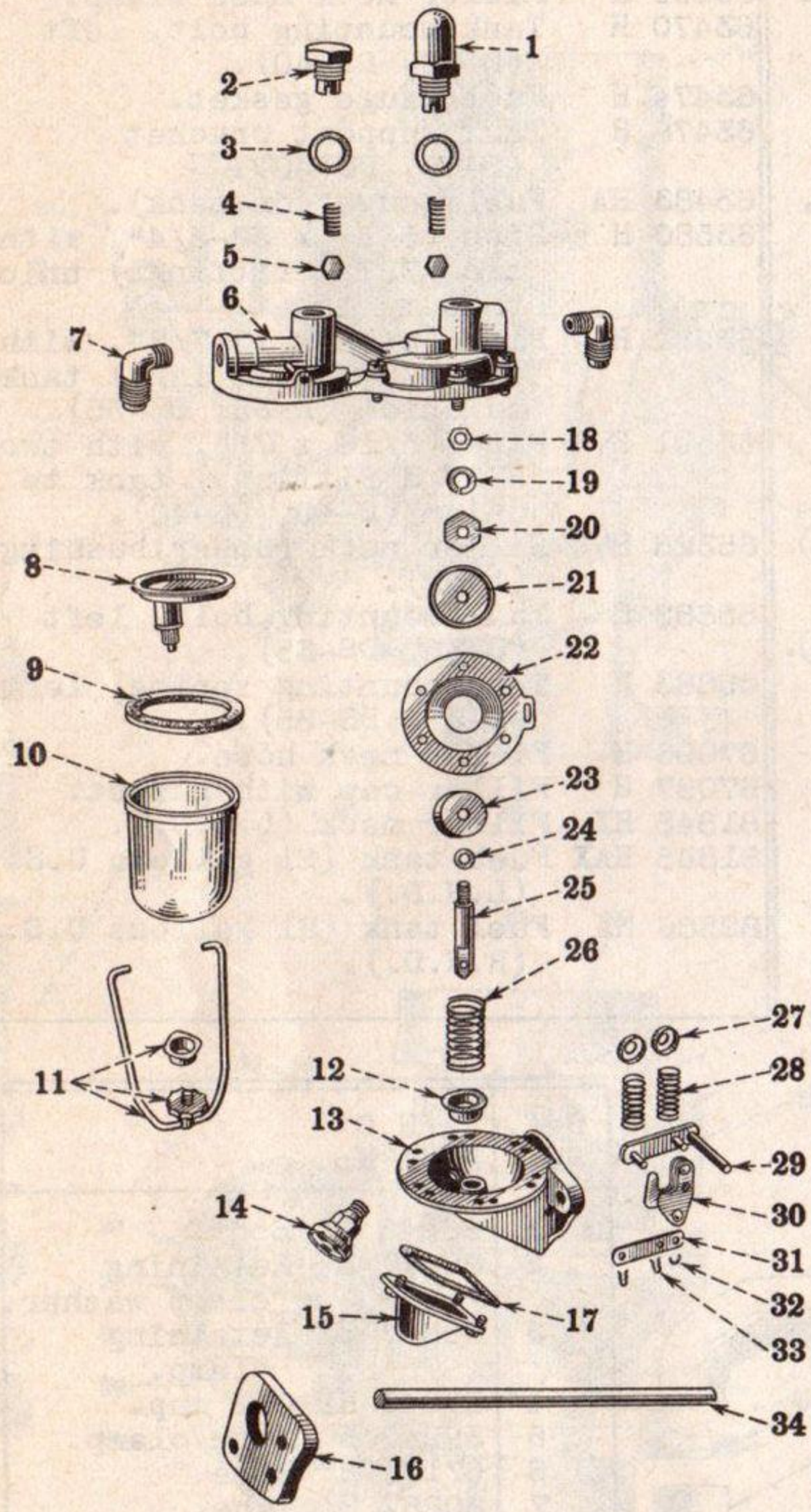

*When ordering, always use IHC Part Nos.*

*Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.*

| Ref. No. | IHC Part No. D-35, DS-35 | IHC Part No. D-40, DS-40 | |
|---|---|---|---|
| 1 | 65730 HA | 65780 HA | Ornament. |
| 2 | 65783 HB | 65784 HB | Name plate. |
| 3 | 65632 H | 65639 H | Moulding. |
| 4 | 65633 H | 65640 H | Moulding. |
| 5 | 65634 H | 65641 H | Moulding. |
| 6 | 65635 H | 65642 H | Moulding. |
| 7 | 65636 H | 65643 H | Moulding. |
| 9 | 65638 H | 65645 H | Moulding. |
| 10 | -------- | 65646 H | Moulding. |
| 11 | 65902 HA | 66075 H | Shell. |
| 12 | 65859 HA | 66459 HA | Core support. |
| 13 | 66083 H | 66086 H | Stay rod, right. |
| 14 | 66084 H | 66086 H | Stay rod, left. |
| 15 | 64233 H | 65879 H | Inlet hose. |
| 16 | 39205 H | 39205 H | Hose clamp. |
| 18 | 39205 H | 39205 H | Hose clamp. |
| 19 | 61816 H | 61816 H | Outlet hose. |
| 20 | 64234 HA | 64231 HA | Core. |
| | -------- | 68226 HA | Core (export). |
| 21 | 2978 YA | 2978 YA | Drain cock. |
| 22 | 71617 H | 71617 H | Spacer. |
| 23 | 71614 H | 71613 H | Bracket lower. |
| 24 | 71616 H | 71616 H | Bracket upper. |
| 25 | 64220 H | 64220 H | Pad. |
| 26 | 24151 H | 24151 H | Spring. |
| 27 | 65829 HA | 65829 HA | Bolt. |
| 28 | 64185 H | 64185 H | Filler cap. |
| 29 | 87741 H | 66021 H | Hood lacing (lower). |
| | 87742 H | | Hood lacing (upper). |

*Don't order parts from the illustrations only; refer to the list also.*

## FUEL PUMP (62891 H)
(3-1/8" diameter diaphragm)

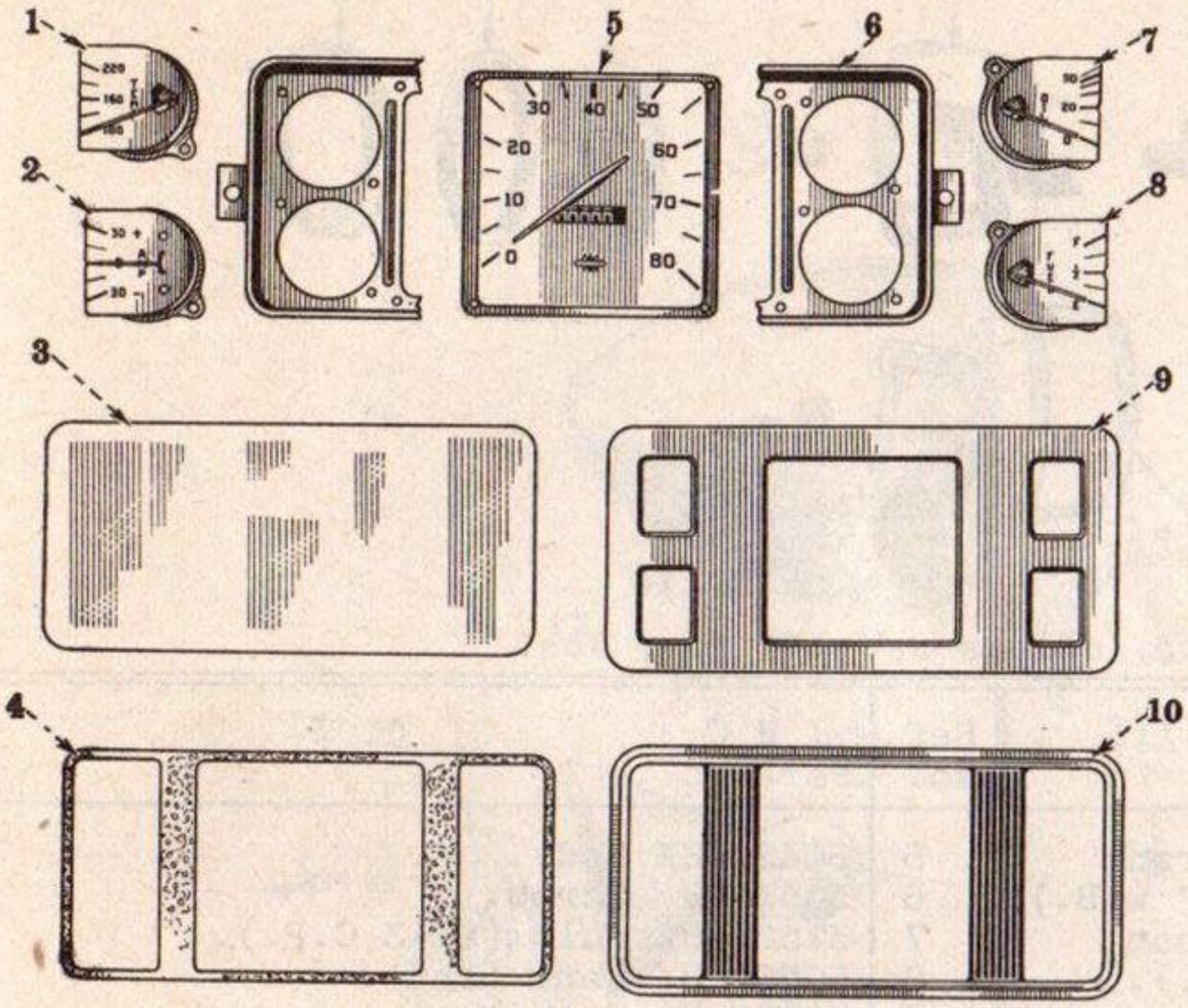



| Ref. No. | I H C Part No. | |
|---|---|---|
| 1 | 23545 D | Outlet valve plug with air dome. |
| 2 | 23525 D | Inlet valve plug. |
| 3 | 23526 D | Gasket. |
| 4 | 26095 D | Spring. |
| 5 | 23518 D | Fibre valve. |
| 6 | 31758 D | Top cover. |
| 7 | 5630 TM | Elbow. |
| 8 | 33438 D | Filtering element. |
| 9 | 51346 VA | Gasket. |
| 10 | 51344 VA | Filter bowl. |
| 11 | 51348 VA | Bail. |
| 12 | 25590 D | Oil seal retainer. |
| 13 | 36349 D | Body. |
| 14 | 39624 HA | Breather and drain plug. |
| 15 | 23527 D | Bottom cover. |
| 16 | 35661 HA | Spacer. |
| 17 | 23528 D | Gasket. |
| 18 | 36348 D | Pull rod nut. |
| 19 | Lockwasher, 1/4". | |
| 20 | 23522 D | Washer. |
| 21 | 28827 D | Diaphragm protector. |
| 22 | 23523 D | Diaphragm. |
| 23 | 23524 D | Diaphragm protector. |
| 24 | 23520 D | Gasket (copper). |
| 25 | 23529 D | Pull rod. |
| 26 | 26097 D | Spring. |
| 27 | 23541 D | Spring cup. |
| 28 | 23530 D | Diaphragm and rocker arm spring. |
| 29 | 36350 D | Pin. |
| 30 | 28824 D | Rocker arm. |
| 31 | 23537 D | Linkage. |
| 32 | 36351 D | Retaining ring. |
| 33 | 23521 D | Clip. |
| 34 | 35662 D | Push rod. |
| .. | 62920 H | Shield. |

*When ordering, always use IHC Part Nos.*

*Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.*

## INSTRUMENT CLUSTER (87164 H)




| Ref. No. | I H C Part No. | |
|---|---|---|
| 1 | 87163 H | Water temperature. |
| 2 | 64954 H | Ammeter (30-30 amps.) |
| 3 | 66580 H | Glass. |
| 4 | 66581 H | Gasket. |
| 5 | ..... | Speedometer (see below). |
| 6 | 67021 HAX | Housing. |
| 7 | 86230 H | Oil pressure. |
| 8 | 64955 HA | Fuel tank supply. |
| 9 | 66582 H | Mask. |
| 10 | 64967 H | Bezel. |

*(See page 10 for Wiring Diagram)*

*When ordering, always use I H C Part Nos.*

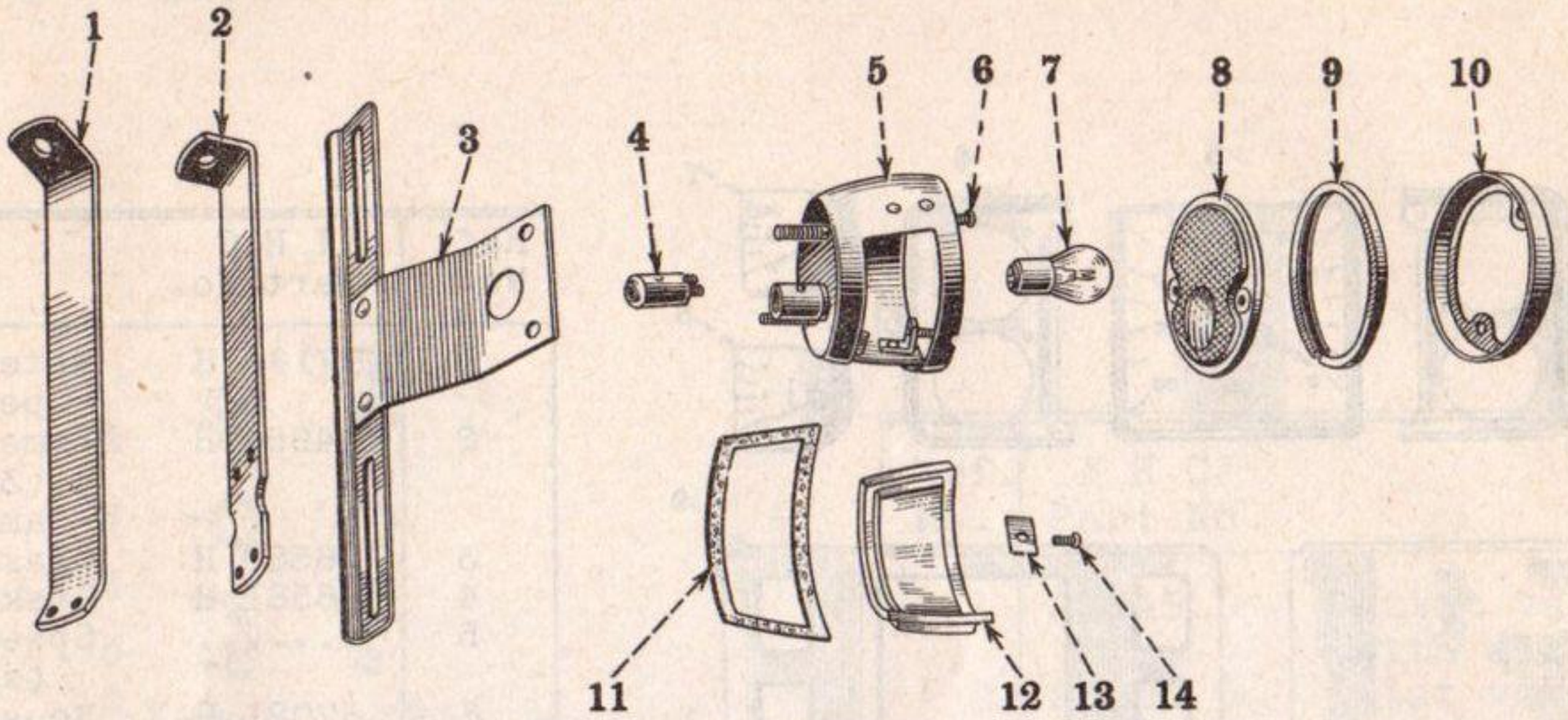
## SPEEDOMETER, CABLES AND DRIVE GEARS

** Service and parts may be obtained at an Authorized Stewart-Warner Service Station.*

| I H C Part No. | Stewart-Warner No. * | Trucks Used On | | | | |
|---|---|---|---|---|---|---|
| | | D-35 | DS-35 | D-40 | DS-40 | |
| 26836 H | 65931 | x | x | .... | ..... | Drive gear (in transmission). |
| 26905 H | 1870 | x | x | x | x | Driven gear bushing (in transmission). |
| 27132 HA | ..... | x | x | .... | ..... | Drive gear spacer. |
| 49739 HA | 97310 | .... | x | .... | x | Two-speed adapter. |
| 63277 HA | 579-N | x | x | x | x | Speedometer (miles per hour). |
| 63278 HA | 579-N | x | x | x | x | Speedometer (kilometers per hour). |
| 63279 H | 94350-72 | .... | .... | x | x | Cable (67245 H and 67247 H). |
| 63285 H | 93250 | x | x | x | x | Drive sleeve (in transmission). |
| 63289 H | 95254 | .... | .... | x | x | Drive gear (in transmission). |
| 66985 H | 94350-66" | x | x | .... | ..... | Cable (67244 H and 67246 H). |
| 67163 HA | ..... | .... | x | .... | x | Two-speed adapter cable swivel. |
| 67213 H | ..... | .... | x | .... | x | Two-speed adapter cable conduit (part of 75395 HAX). |
| 67244 H | 64207-66 | x | x | .... | ..... | Cable core (part of 66985 H). |
| 67245 H | 64207-72 | .... | .... | x | x | Cable core (part of 63279 H). |
| 67246 H | 94356-66 | x | x | .... | ..... | Cable conduit (part of 66985 H). |
| 67247 H | 94356-72 | .... | .... | x | x | Cable conduit (part of 63279 H). |
| 71198 H | ..... | x | x | x | x | Cable rubber bushing. |
| 75393 H | ..... | .... | x | .... | x | Two-speed adapter lever. |
| 75394 H | ..... | .... | x | .... | x | Two-speed adapter cable clamp. |
| 75395 HA | ..... | .... | x | .... | x | Two-speed adapter cable core (part of 75395 HAX). |
| 75395 HAX | ..... | .... | x | .... | x | Two-speed adapter cable (67213 H and 75395 H). |
| 4167 T | ..... | .... | .... | x | x | Drive gear key (in transmission). |

*Don't order parts from the illustrations only; refer to the list also.*

## Combination Stop and Tail Lamp (50004 H) (6-8 Volt)
(One-piece Red Lens)

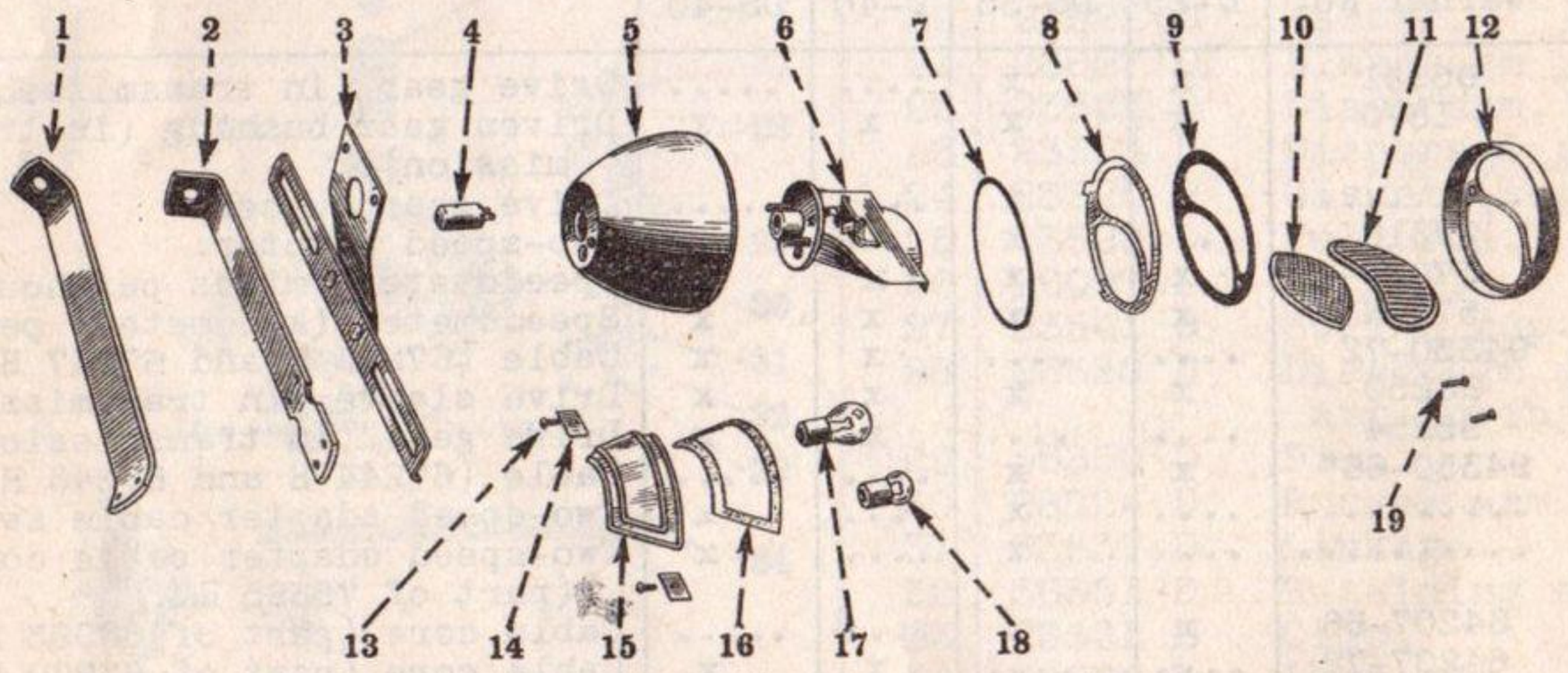



*When ordering, always use IHC Part Nos.*

| Ref. No. | I H C Part No. | | Ref. No. | I H C Part No. | |
|---|---|---|---|---|---|
| 1 | 67012 H | Mounting bracket, front (not 134" and 137" W.B.). | 5 | 50495 HX | Body. |
| | 72010 H | Mounting bracket, front (134 and 137" W.B.). | 6 | 50530 H | Screw. |
| 2 | 67013 H | Mounting bracket, rear (not 134" and 137" W.B.). | 7 | 37568 HA | Bulb (21-3 C.P.). |
| | 72011 H | Mounting bracket, rear (134" and 137" W.B.). | 8 | 50501 H | Lens (red). |
| 3 | 42372 HX | License plate bracket. | 9 | 50502 H | Gasket. |
| 4 | 51003 H | Connector. | 10 | 50500 H | Retainer. |
| | | | 11 | 50503 H | Gasket. |
| | | | 12 | 50504 H | Outlook glass. |
| | | | 13 | 71673 H | Retainer. |
| | | | 14 | 18372 D | Screw. |

## Combination Stop and Tail Lamp (46410 H) (6-8 Volt)

Two-piece Lens { Orange stop lens. / Red tail lens.

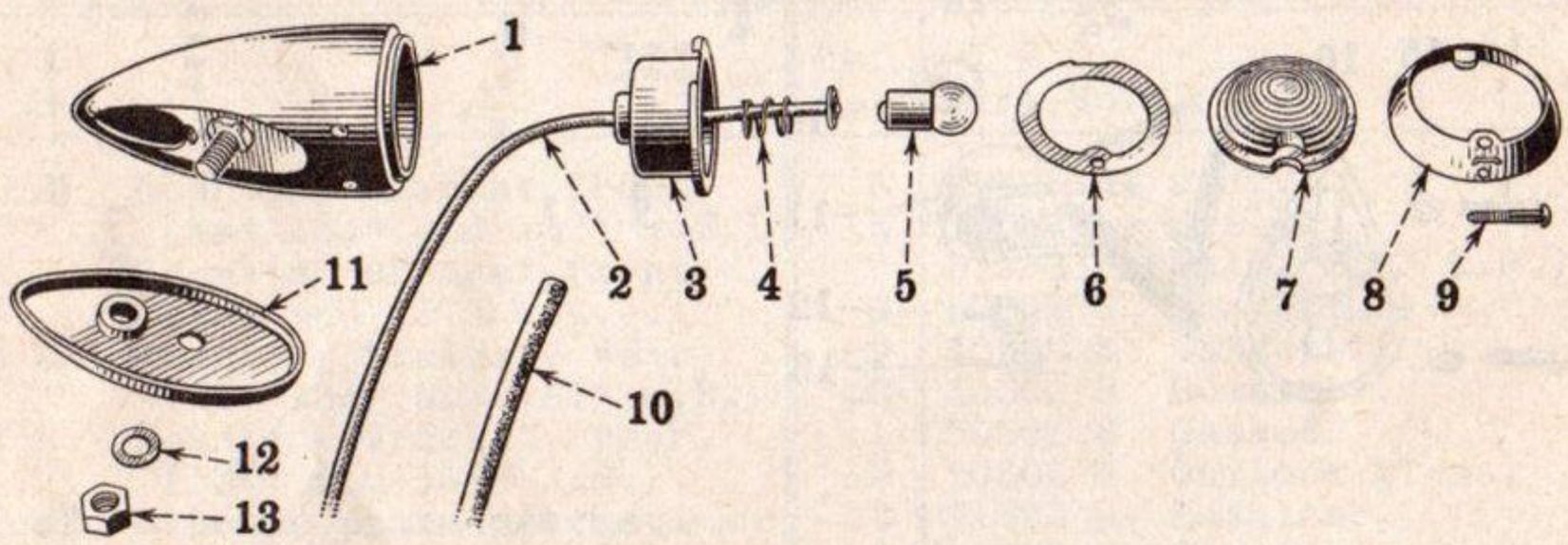



| Ref. No. | I H C Part No. | | Ref. No. | I H C Part No. | |
|---|---|---|---|---|---|
| 1 | 67012 H | Mounting bracket, front (not 134" and 137" W.B.) | 8 | 48007 H | Plate. |
| | 72010 H | Mounting bracket, front (134" and 137" W.B.). | 9 | 48004 H | Gasket. |
| 2 | 67012 H | Mounting bracket, rear (not 134" and 137" W.B.) | 10 | 48005 H | Lens (red). |
| | 72011 H | Mounting bracket, rear (134" and 137" W.B.). | 11 | 48006 H | Lens (orange). |
| 3 | 68598 H | License plate bracket. | 12 | 48003 H | Retainer. |
| 4 | 51003 H | Connector. | 13 | 42265 V | Screw. |
| 5 | 48002 H | Body. | 14 | 18368 D | Retainer. |
| 6 | 48009 HY | Plate. | 15 | 48020 H | Outlook glass. |
| 7 | 48008 H | Gasket. | 16 | 48019 H | Gasket. |
| | | | 17 | 25955 H | Bulb (stop) (15 C.P.). |
| | | | 18 | 7494 H | Bulb (tail) (3 C.P.). |
| | | | 19 | 48021 H | Screw. |

*Don't order parts from the illustrations only; refer to the list also.*

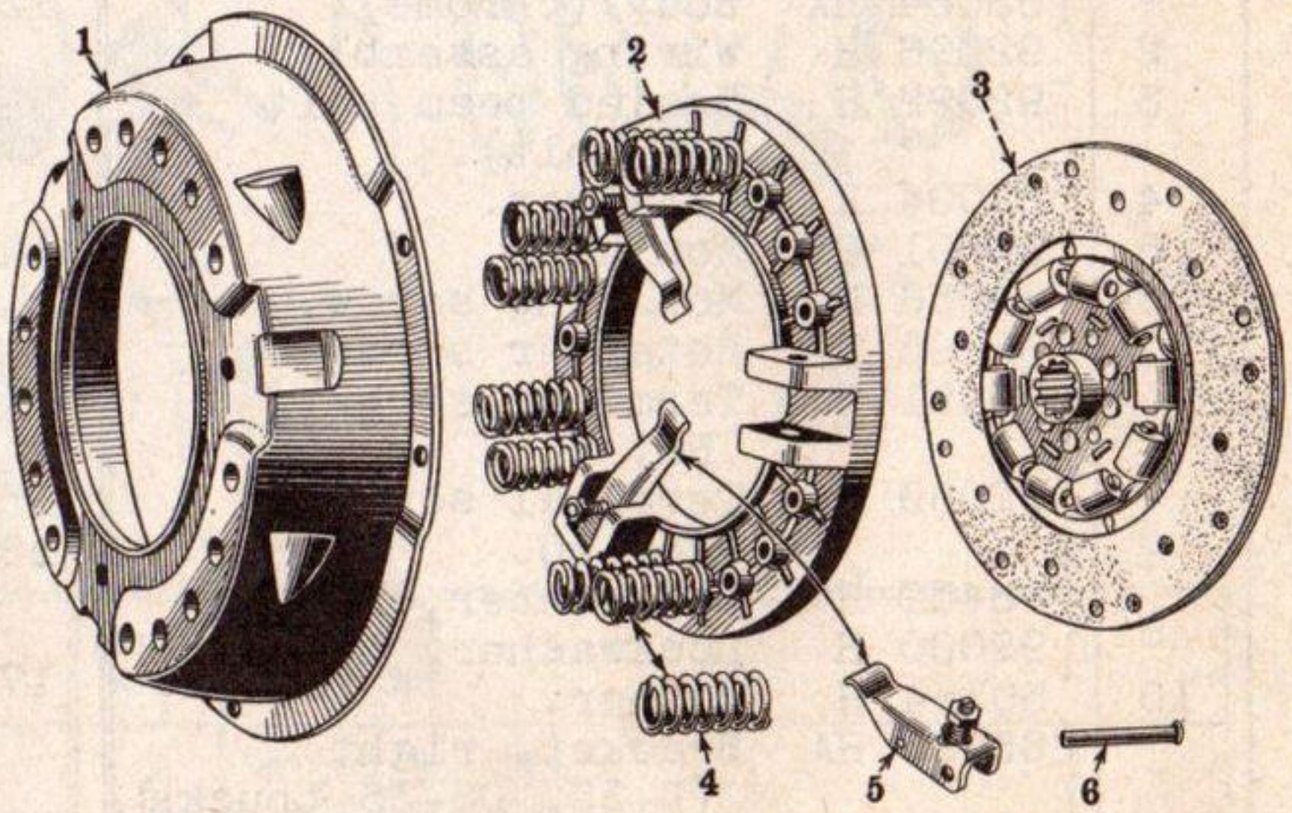
## PARKING LAMPS (90353 H - 6 volt)
(on Front Fenders)

| Ref. No. | I H C Part No. | |
|---|---|---|
| 1 | 92104 HX | Body. |
| 2 | 92117 HX | Cable, 88" long. |
| 3 | 92119 HX | Socket. |
| 4 | 92121 H | Spring. |
| 5 | 7494 H | Bulb, 6 volt. |
| 6 | 92111 H | Lens gasket. |
| 7 | 92108 H | Lens. |
| 8 | 92109 HX | Lens retainer. |
| 9 | 87979 H | Retainer screw. |
| 10 | 89963 H | Loom. |
| 11 | 89968 H | Rubber pad. |
| 12 | ..... | Lockwasher, 3/8". |
| 13 | ..... | Hex. nut, 3/8". |




## CLUTCH (IHC Model R-11-TT)
(68131 HB)

| Ref. No. | I H C Part No. | |
|---|---|---|
| 1 | 68738 H | Backing plate. |
| 2 | 68739 H | Pressure plate. |
| 3 | 43667 HD | Facing plate and facings. |
| 4 | 68740 H | Pressure spring. |
| 5 | 68741 HAX | Release lever. |
| 6 | 29774 HB | Release lever pin. |
| ... | 29782 HBX | Carton consisting of two facings. |
| ... | 68738 HAX | Pressure plate with release parts and backing plate. |
| ... | 53795 V | Facing rivet. |



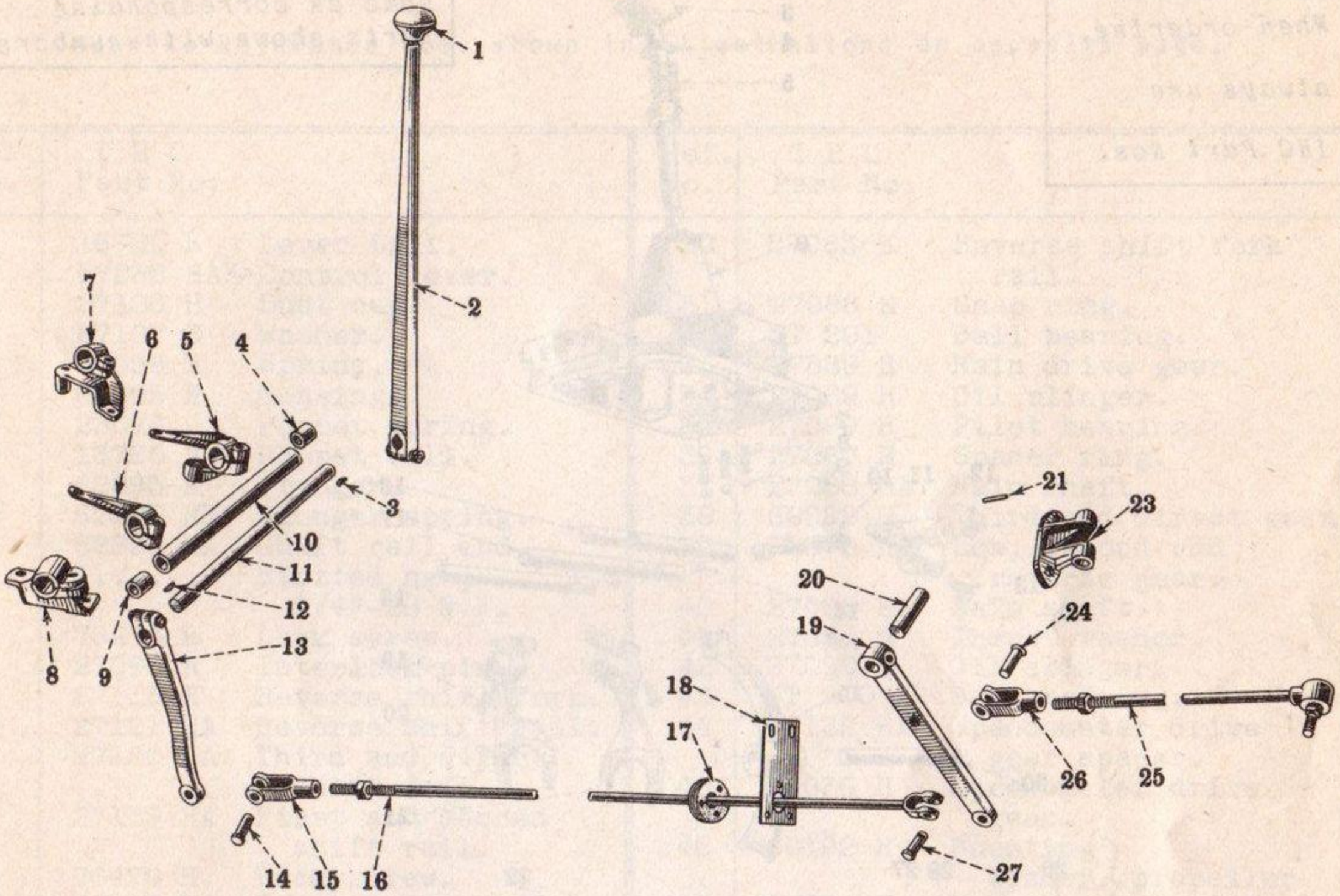

*When ordering, always use I H C Part Nos.*

*Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.*

*Don't order parts from the illustrations only; refer to the list also.*

# GEAR SHIFT CONTROL (TWO SPEED REAR AXLE)

(DS-35 and DS-40 Trucks only - Left Hand Drive)




*When ordering, always use I H C Part Nos.*

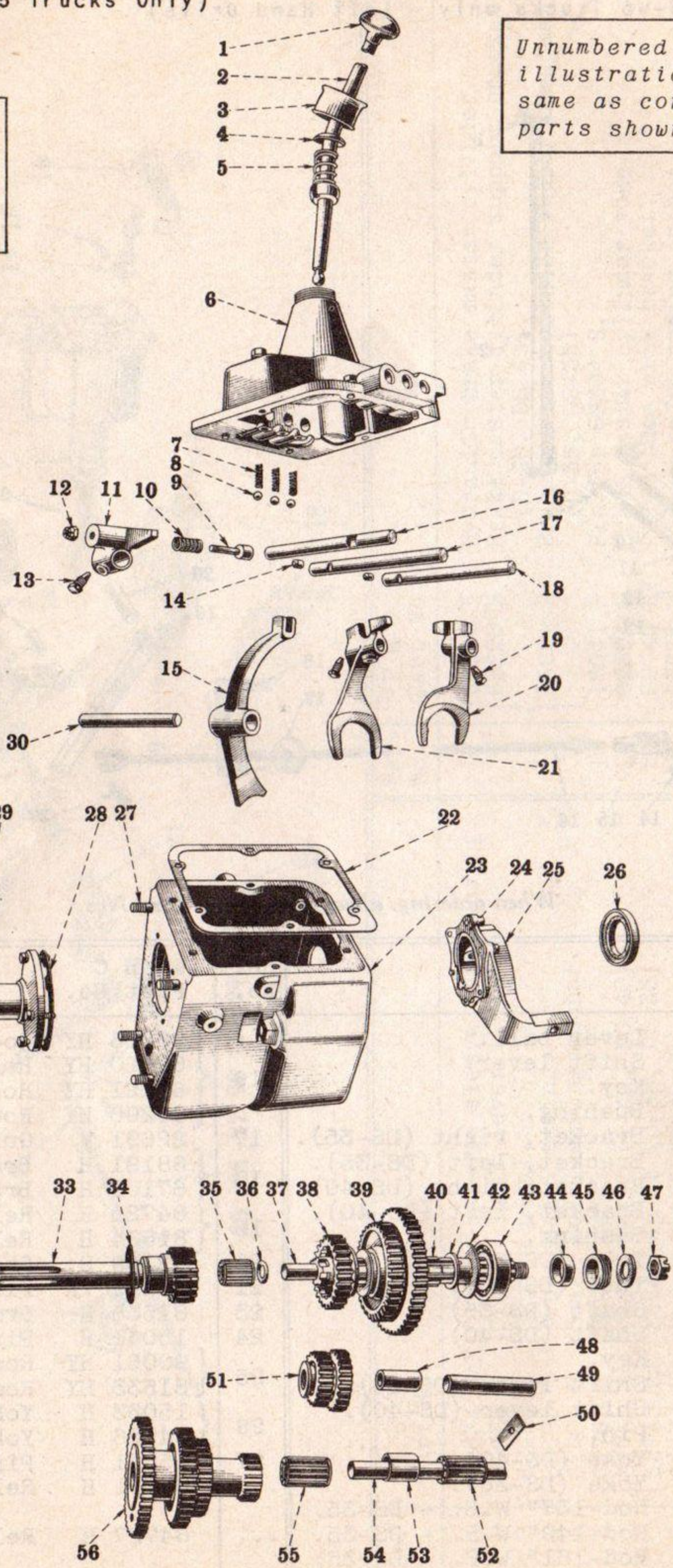
| Ref. No. | I H C Part No. | | Ref. No. | I H C Part No. | |
|---|---|---|---|---|---|
| 1 | 16780 H | Lever ball. | 16 | 28535 HY | Rod-134" W.B.-DS-40. |
| 2 | 67117 H | Shift lever. | | 67120 HY | Rod-158" W.B.-DS-40. |
| 3 | 17168 D | Key. | | 67121 HY | Rod-176" W.B.-DS-40. |
| 4 | 19297 H | Bushing. | | 67296 HY | Rod-146" W.B.-DS-40. |
| 5 | 68197 H | Bracket, right (DS-35). | 17 | 22691 V | Guide. |
| 6 | 68198 H | Bracket, left (DS-35). | 18 | 68191 H | Bracket (DS-35). |
| 7 | 67288 H | Bracket, right (DS-40). | | 67108 H | Bracket (DS-40). |
| 8 | 67289 H | Bracket, left (DS-40). | 19 | 84725 H | Relay lever (DS-35). |
| 9 | 19297 H | Bushing. | | 81534 H | Relay lever (DS-40). |
| 10 | 67103 HX | Tube (DS-35). | 20 | 67109 H | Shaft (DS-40). |
| | 67987 HX | Tube (DS-40). | 21 | 43222 VA | Pin (DS-40). |
| 11 | 68187 H | Shaft (DS-35). | 23 | 81535 H | Bracket (DS-40). |
| | 67287 H | Shaft (DS-40). | 24 | 15041 H | Pin. |
| 12 | 17168 D | Key. | 25 | 90061 HY | Rod (DS-35). |
| 13 | 68199 H | Shift lever (DS-35). | | 81533 HY | Rod (DS-40). |
| | 67291 H | Shift lever (DS-40). | 26 | 15033 H | Yoke (DS-40). |
| 14 | 15041 H | Pin. | | 84726 H | Yoke (DS-35). |
| 15 | 15033 H | Yoke (DS-40). | 27 | 15041 H | Pin. |
| | 84726 H | Yoke (DS-35). | ... | 84721 H | Relay lever bracket (DS-35). |
| 16 | 84850 H | Rod-137" W.B. - DS-35. | ... | 84727 H | Relay lever pin (DS-35). |
| | 84851 H | Rod-149" W.B. - DS-35. | | | |
| | 84852 H | Rod-161" W.B. - DS-35. | | | |
| | 84853 H | Rod-179" W.B. - DS-35. | | | |

*Don't order parts from the illustrations only; refer to the list also.*

# TRANSMISSION (4-Speed) (IHC Model H-41A) (62913 HB)
## (D-35 and DS-35 Trucks Only)

*When ordering, always use IHC Part Nos.*

*Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.*



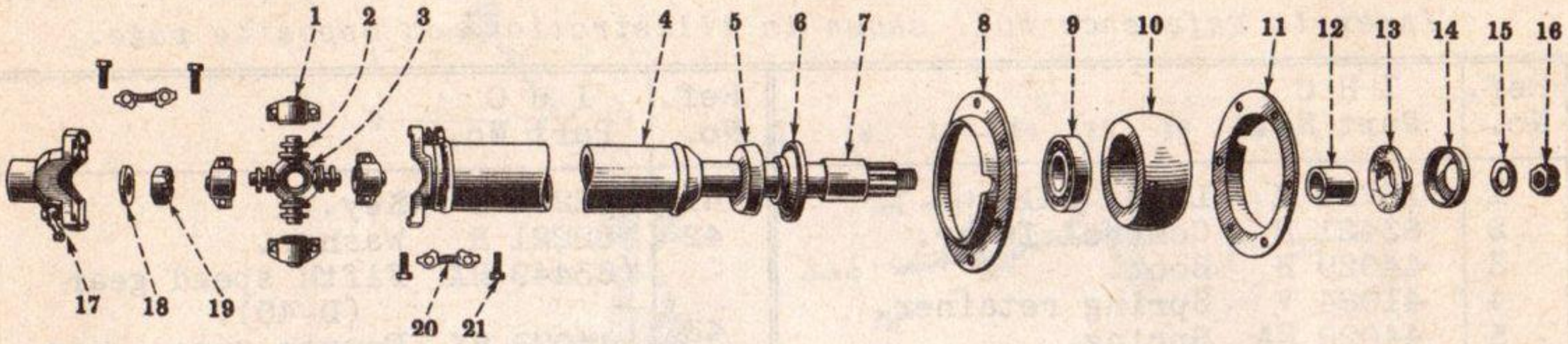
TRANSMISSION (4-Speed) (IHC Model H-41A) (62913 HB)
(D-35 and DS-35 Trucks Only)

Index to Reference Nos. shown in illustrations on opposite page.

| Ref. No. | I H C Part No. | | Ref. No. | I H C Part No. | |
|---|---|---|---|---|---|
| 1 | 16780 H | Lever ball. | 30 | 27083 H | Reverse shift fork rail. |
| 2 | 67232 HAX | Control lever. | 31 | 27086 H | Snap ring. |
| 3 | 27108 H | Dust cap. | 32 | ST 201 | Ball bearing. |
| 4 | 27107 H | Washer. | 33 | 77889 H | Main drive gear. |
| 5 | 27098 H | Spring. | 34 | 27089 H | Oil slinger. |
| 6 | 62905 H | Housing. | 35 | 27009 H | Pilot bearing. |
| 7 | 23074 H | Poppet spring. | 36 | 27087 H | Spacer ring. |
| 8 | 13765 V | Poppet ball. | 37 | 27068 HA | Main shaft. |
| 9 | 62893 H | Plunger. | 38 | 62899 H | Third and direct gear. |
| 10 | 62892 HB | Plunger spring. | 39 | 72975 H | Low, second and reverse gear. |
| 11 | 62894 HA | Shift rail end. | 40 | 27068 HA | Main shaft. |
| 12 | ..... | Slotted nut, 1/4"-28 N.F. | 41 | 27088 H | Thrust washer. |
| 13 | 76476 H | Lock screw. | 42 | 27090 H | Oil slinger. |
| 14 | 27096 H | Interlock pin. | 43 | ST 200 | Ball bearing. |
| 15 | 27118 H | Reverse shift fork. | 44 | 27132 HA | Speedometer drive gear spacer. |
| 16 | 27121 HA | Reverse shift rail. | 45 | 26836 H | Speedometer drive gear. |
| 17 | 27120 HA | Third and direct shift rail. | 46 | 60192 H | Mounting washer. } propeller shaft. |
| 18 | 27119 HA | First and second shift rail. | 47 | 13884 V | Mounting nut. } propeller shaft. |
| 19 | 76476 H | Lock screw. | 48 | 35224 H | Reverse idler gear bushing. |
| 20 | 27112 HA | First and second shift fork. | 49 | 27079 H | Reverse idler gear shaft. |
| 21 | 27111 HA | Third and direct shift fork. | 50 | 27082 H | Lock plate. |
| 22 | 27122 H | Gasket. | 51 | 62902 HAX | Reverse idler gear. |
| 23 | 62909 HBX | Transmission case. | 52 | 23172 H | Roller bearing. |
| 24 | 27116 H | Gasket. | 53 | 27091 H | Spacer. |
| 25 | 27072 HAX | Main shaft bearing retainer. | 54 | 27069 H | Countershaft. |
| 26 | 27093 HA | Oil seal. | 55 | 23172 H | Roller bearing. |
| 27 | 26893 H | Stud. | 56 | 72976 H | Countershaft gear. |
| 28 | 27110 H | Gasket. | | | |
| 29 | 75873 H | Main drive gear bearing retainer. | | | |

*When ordering, always use IHC Part Nos.*

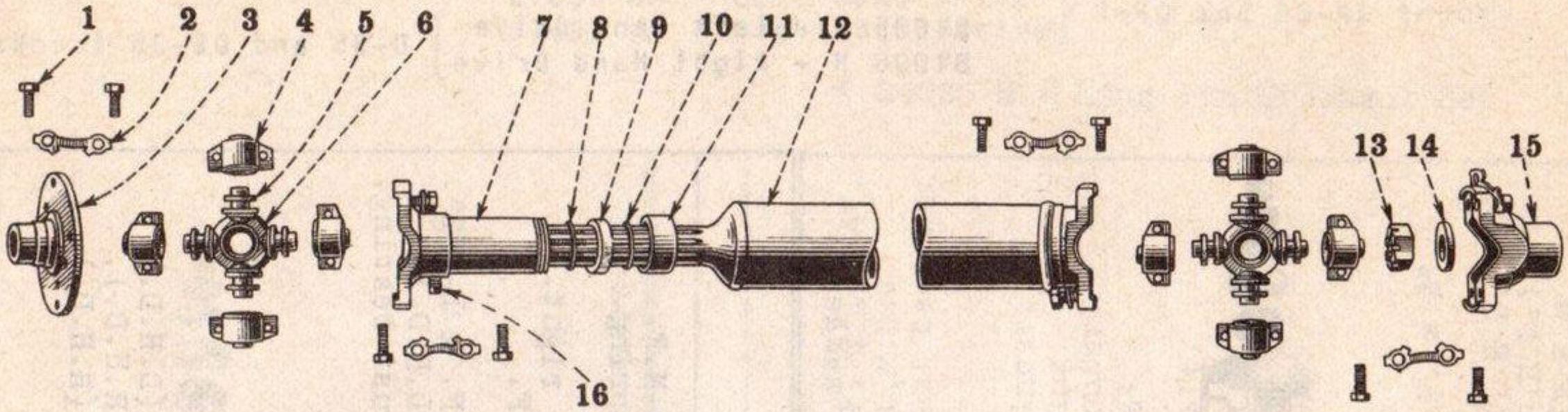
## FRONT PROPELLER SHAFT AND CENTER BEARING (IHC Model MC-5)




*Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.*
*When ordering, always use I H C Part Nos.*

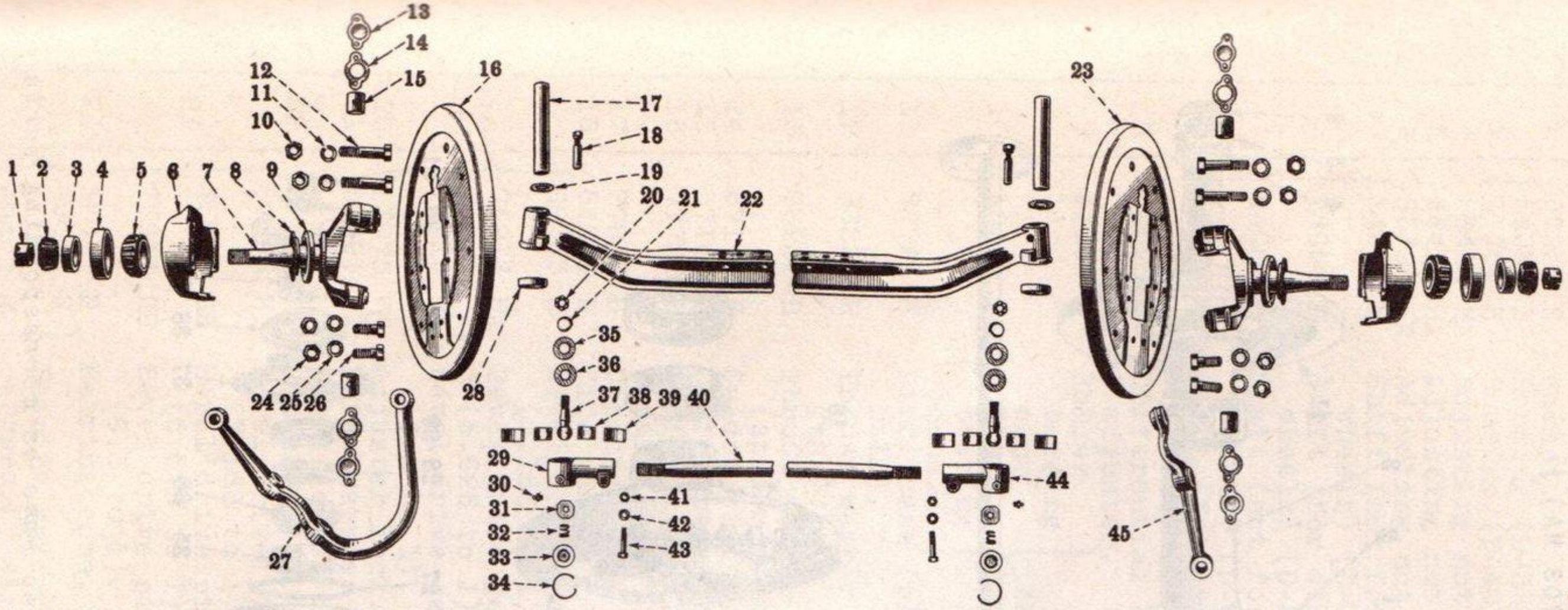
| Ref. No. | I H C Part No. | |
|---|---|---|
| 1 | 37328 HX | Universal joint trunnion bearing. |
| 2 | 37336 H | Washer. |
| 3 | 37327 HAX | Universal joint cross. |
| 4 | 62954 HAX | Tube assembly (137", 149", 161" W.B.) (D-35 and DS-35 trucks). |
| | 62956 HAX | Tube assembly (179" W.B.) (D-35 and DS-35 trucks). |
| | 62958 HBX | Tube assembly (134", 146", 158" W.B.) (D-40 and DS-40 trucks). |
| | 62960 HBX | Tube assembly (176" W.B.) (D-40 and DS-40 trucks). |
| 5 | 62871 H | Center bearing dust shield (D-35 and DS-35 trucks). |
| | 62879 H | Center bearing dust shield, front (D-40 and DS-40 trucks). |
| 6 | 62868 H | Center bearing grease retainer and felt (D-35 and DS-35 trucks). |
| | 62875 H | Center bearing grease retainer and felt (D-40 and DS-40 trucks). |
| 7 | 62872 H | Center bearing spacer (D-35 and DS-35 trucks). |
| | 30228 VA | Center bearing spacer (D-40 and DS-40 trucks). |
| 8 | 42134 H | Center bearing housing carrier. |
| 9 | 56144 H | Center bearing (double row) (D-40 and DS-40 trucks). |
| | 62873 H | Center bearing (double row) (D-35 and DS-35 trucks). |
| 10 | 62874 H | Center bearing housing (D-35 and DS-35 trucks). |
| | 62880 H | Center bearing housing (D-40 and DS-40 trucks). |
| 11 | 42134 H | Center bearing housing carrier. |
| 12 | 62872 H | Center bearing spacer (D-35 and DS-35 trucks). |
| | 30228 VA | Center bearing spacer (D-40 and DS-40 trucks). |
| 13 | 62868 H | Center bearing grease retainer and felt (D-35 and DS-35 trucks). |
| | 62875 H | Center bearing grease retainer and felt (D-40 and DS-40 trucks). |
| 14 | 62871 H | Center bearing dust shield (D-35 and DS-35 trucks). |
| | 62878 H | Center bearing dust shield, rear (D-40 and DS-40 trucks). |
| 15 | 60192 H | Mounting nut washer. |
| 16 | 13884 V | Mounting nut. |
| 17 | 36854 H | Companion flange (at transmission) (D-35 and DS-35 trucks). |
| | 62967 H | Companion flange (at transmission) (D-40 and DS-40 trucks). |
| 18 | 60192 H | Mounting nut washer. |
| 19 | 63455 H | Mounting nut (D-40 and DS-40 trucks). |
| | 13884 V | Mounting nut (D-35 and DS-35 trucks). |
| 20 | 37337 H | Universal joint lockplate. |
| 21 | 37480 H | Capscrew. |
| ... | 62953 H | Shaft, complete less companion flange (137", 149", 161" W.B.) (D-35 and DS-35 trucks). |
| ... | 62955 H | Shaft, complete less companion flange (179" W.B.) (D-35 and DS-35 trucks). |
| ... | 62957 HA | Shaft, complete less companion flange (134", 146", 158" W.B.) (D-40 and DS-40 trucks). |
| ... | 62959 HA | Shaft, complete less companion flange (176" W.B.) (D-40 and DS-40 trucks). |
| ... | Q 3615 | Center bearing grease fitting (D-35 and DS-35 trucks). |
| ... | Q 3621 | Center bearing grease fitting (D-40 and DS-40 trucks). |

## REAR PROPELLER SHAFT (IHC Model MC-5)




*When ordering, always use I H C Part Nos. Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.*

| Ref. No. | I H C Part No. | |
|---|---|---|
| 1 | 37479 H | Capscrew, short. |
| | 37480 H | Capscrew, long. |
| 2 | 37337 H | Universal joint lockplate. |
| 3 | 36853 H | Companion flange (at center bearing) (D-35 and DS-35 trucks). |
| | 62968 H | Companion flange (at center bearing) (D-40 and DS-40 trucks). |
| 4 | 37328 HX | Universal joint trunnion bearing. |
| 5 | 37336 H | Washer. |
| 6 | 37327 HAX | Universal joint cross. |
| 7 | 37329 HX | Slip yoke. |
| 8 | 22251 V | Washer. |
| 9 | 37348 H | Felt. |
| 10 | 22251 V | Washer. |
| 11 | 22259 V | Felt retainer. |
| 12 | 58655 HAX | Tube assembly (179" W.B.) (D-35 and DS-35 trucks). |
| | 38761 HBX | Tube assembly (158" and 176" W.B.) (D-40 trucks) (D-35 and DS-35 trucks 161" W.B.). |
| | 62963 HBX | Tube assembly (134" W.B.) (D-40 trucks) (D-35 and DS-35 trucks 137" W.B.). |
| | 62966 HBX | Tube assembly (146" W.B.) (D-40 trucks) (D-35 and DS-35 trucks 149" W.B.) |
| | 45845 HBX | Tube assembly (158" and 176" W.B.) (DS-40 trucks). |
| | 59808 HAX | Tube assembly (134" W.B.) (DS-40 trucks). |
| | 76171 HBX | Tube assembly (146" W.B.) (DS-40 trucks). |
| 13 | 54556 H | Mounting nut (D-35, D-40 and DS-40 trucks). |
| | 13884 V | Mounting nut (DS-35 trucks). |
| 14 | 54557 H | Mounting nut washer (D-35 and D-40 trucks). |
| | Q 1558 | Mounting nut washer (DS-35 trucks). |
| | 60863 H | Mounting nut washer (DS-40 trucks). |
| 15 | 89708 H | Companion flange (at rear axle) (DS-35 trucks). |
| | 57093 H | Companion flange (at rear axle) (D-35, D-40 and DS-40 trucks). |
| 16 | ..... | Grease plug. |
| ... | 59806 HA | Shaft, complete less companion flanges (134" W.B.) (DS-40 trucks). |
| ... | 58653 HA | Shaft, complete less companion flanges (179" W.B.) (D-35,DS-35). |
| ... | 76169 HA | Shaft, complete less companion flanges (146" W.B.) (DS-40 trucks). |
| ... | 45843 HA | Shaft, complete less companion flanges (158" and 176" W.B.)(DS-40). |
| ... | 62961 HA | Shaft, complete less companion flanges (134" W.B.) (D-40 trucks). |
| | | Shaft, complete less companion flanges (137" W.B.) (D-35,DS-35). |
| ... | 62964 HA | Shaft, complete less companion flanges (146" W.B.) (D-40 trucks). |
| | | Shaft, complete less companion flanges (149" W.B.) (D-35, DS-35). |
| ... | 38759 HA | Shaft, complete less companion flanges (158" and 176" W.B.)(D-40). |
| | | Shaft, complete less companion flanges (161" W.B.) (D-35, DS-35). |
| ... | 59807 HA | Shaft assembly less front universal joint (134" W.B.) (DS-40). |
| ... | 58654 HA | Shaft assembly less front universal joint (179" W.B.) (D-35, DS-35). |
| ... | 76170 HA | Shaft assembly less front universal joint (146" W.B.) (DS-40). |
| ... | 45844 HA | Shaft assembly less front universal joint (158" and 176" W.B.)(DS-40). |
| ... | 62962 HA | Shaft assembly less front universal joint (134" W.B.) (D-40 trucks). |
| | | Shaft assembly less front universal joint (137" W.B.) (D-35, DS-35). |
| ... | 62965 HA | Shaft assembly less front universal joint (146" W.B.) (D-40 trucks). |
| | | Shaft assembly less front universal joint (149" W.B.) (D-35, DS-35). |
| ... | 38760 HA | Shaft assembly less front universal joint (158" and 176" W.B.) (D-40 trucks). |
| | | Shaft assembly less front universal joint (161" W.B.) (D-35, DS-35). |



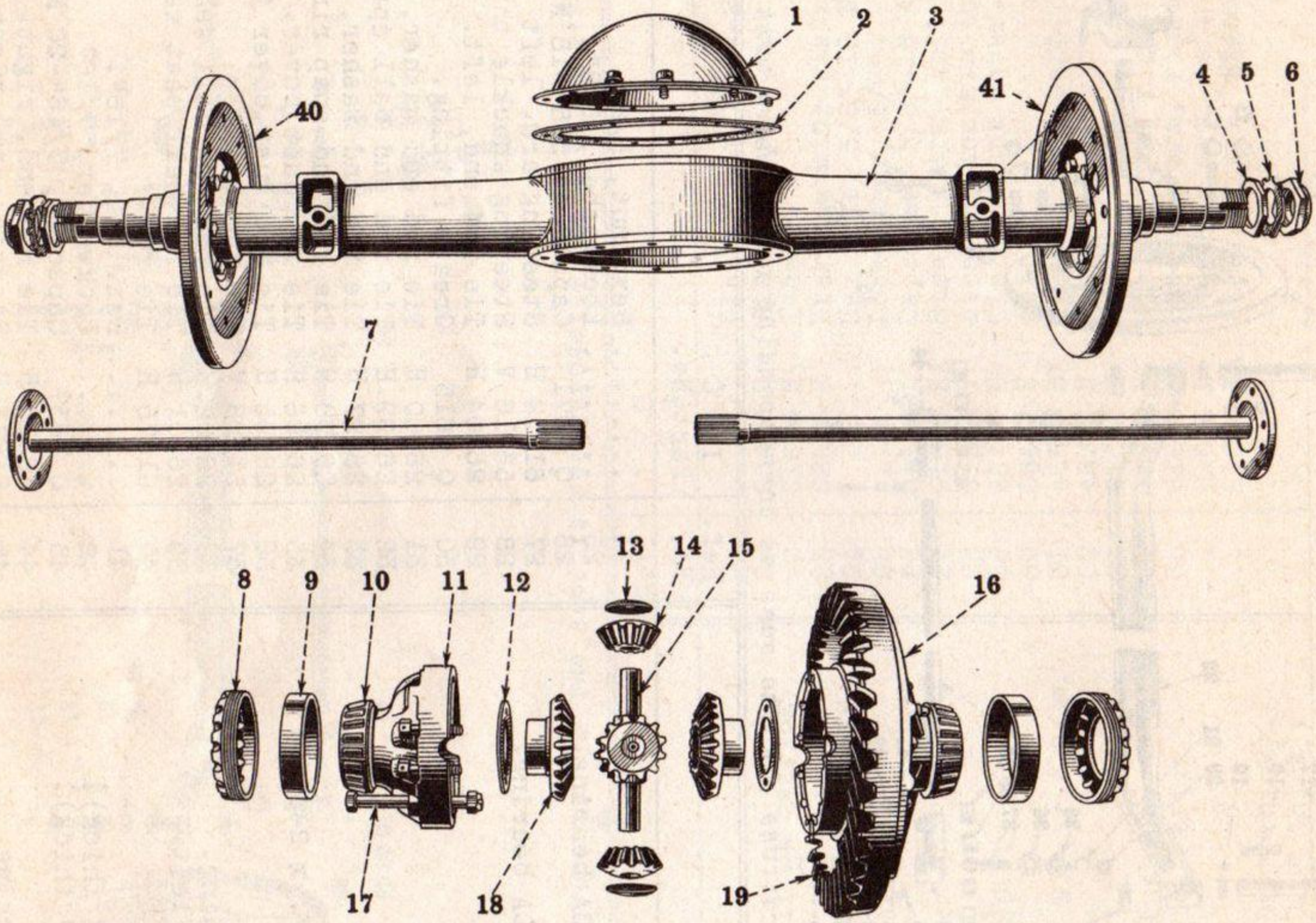

*Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.*

| Ref. No. | I H C Part No. | Ref. No. | I H C Part No. |
|---|---|---|---|
| 1 | 10305 V Adjusting nut. | 24 | ..... Hex. nut, 5/8". |
| 2 | 13361 DA Bearing cone } 20645 DA bearing. | 25 | ..... Lockwasher, 5/8". |
| 3 | 20646 D Bearing cup } | 26 | Q 1871 Capscrew, 5/8"-18 N.F. x 1-3/4". |
| 4 | 20659 D Bearing cup } 20656 DA bearing. | 27 | 61714 H Steering arm, left (L.H.D.) |
| 5 | 20660 DA Bearing cone } | 28 | 53916 V Steering knuckle thrust bearing. |
| 6 | 61679 H Grease guard. | 29 | 26504 H Tie rod end, left. |
| 7 | 61667 HAX Steering knuckle. | 30 | Q 3615 Grease fitting. |
| 8 | 29462 H Hub felt retainer. | 31 | 26500 H Tie rod end washer, inner. |
| 9 | 64950 H Hub felt. | 32 | 26499 H Tie rod end ball spring. |
| 10 | ..... Hex. nut, 5/8". | 33 | 26497 H Tie rod end washer, outer. |
| 11 | ..... Lockwasher, 5/8". | 34 | 26498 H Tie rod end snap ring. |
| 12 | Q 4106 Capscrew, 5/8"-18 N.F. x 2-3/4". | 35 | 26496 H Tie rod dust cover. |
| 13 | 51122 VA King pin cap. | 36 | 26495 H Tie rod dust cover felt. |
| 14 | 51123 V Gasket. | 37 | 51228 V Tie rod ball. |
| 15 | 61676 H Steering knuckle bushing. | 38 | 26502 H Tie rod end ball seat. |
| 16 | 62524 HX Brake backing plate, left. | 39 | 26501 H Tie rod ball seat wedge. |
| 17 | *61680 H King pin. | 40 | 61675 H Tie rod. |
| 18 | 51121 V King pin draw key. | 41 | ..... Hex. nut, 7/16". |
| 19 | 61677 H Spacing washer (.005" thick). | 42 | ..... Lockwasher, 7/16". |
| | 61678 H Spacing washer (.010" thick). | 43 | Q 1837 Capscrew, 7/16"-20 N.F. x 2". |
| 20 | ..... Slotted nut, 5/8". | 44 | 26503 H Tie rod end, right. |
| 21 | 26494 H Tie rod dust cover spring. | 45 | 61673 H Steering arm, right (L.H.D.). |
| 22 | 61682 H I-beam. | ... | 61674 H Steering arm, left (R.H.D.). |
| 23 | 62523 H Brake backing plate, right. | ... | 61715 H Steering arm, right (R.H.D.) |

REAR AXLE AND DIFFERENTIAL

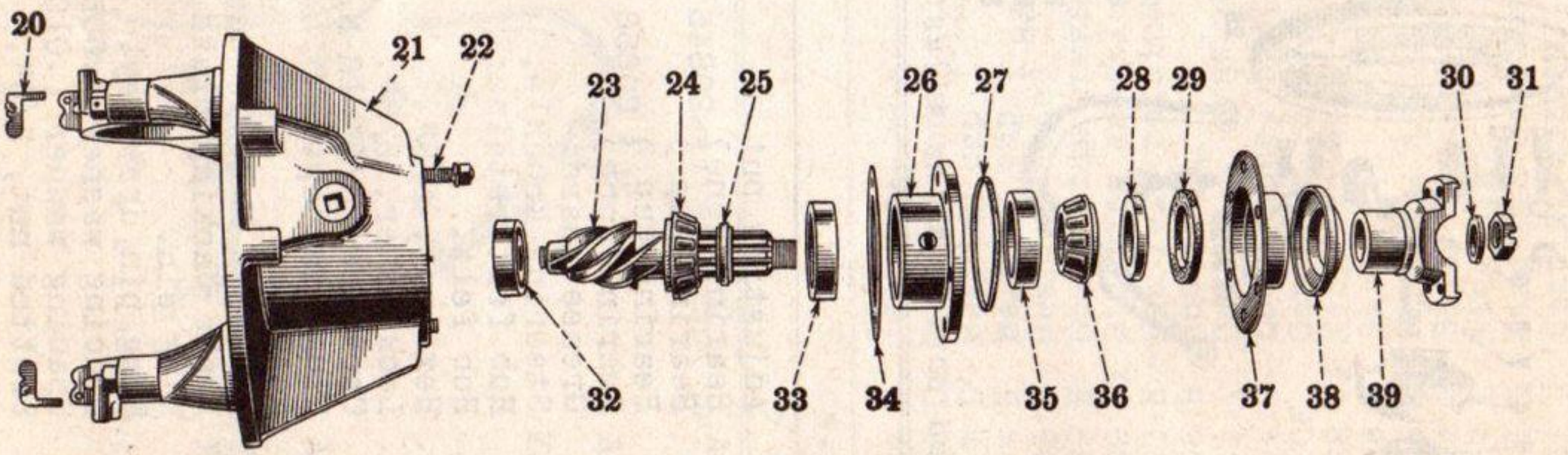
IHC Model R-1430 { 5.625 to 1 ratio (77466 HA) / 6.5 to 1 ratio (77467 HA) / 7.166 to 1 ratio (77468 HA) } D-35 trucks only.

IHC Model RX-1400 { 5.625 to 1 ratio (77701 HA) / 6.5 to 1 ratio (77702 HA) / 7.166 to 1 ratio (77703 HA) } D-40 trucks only.










*Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.*

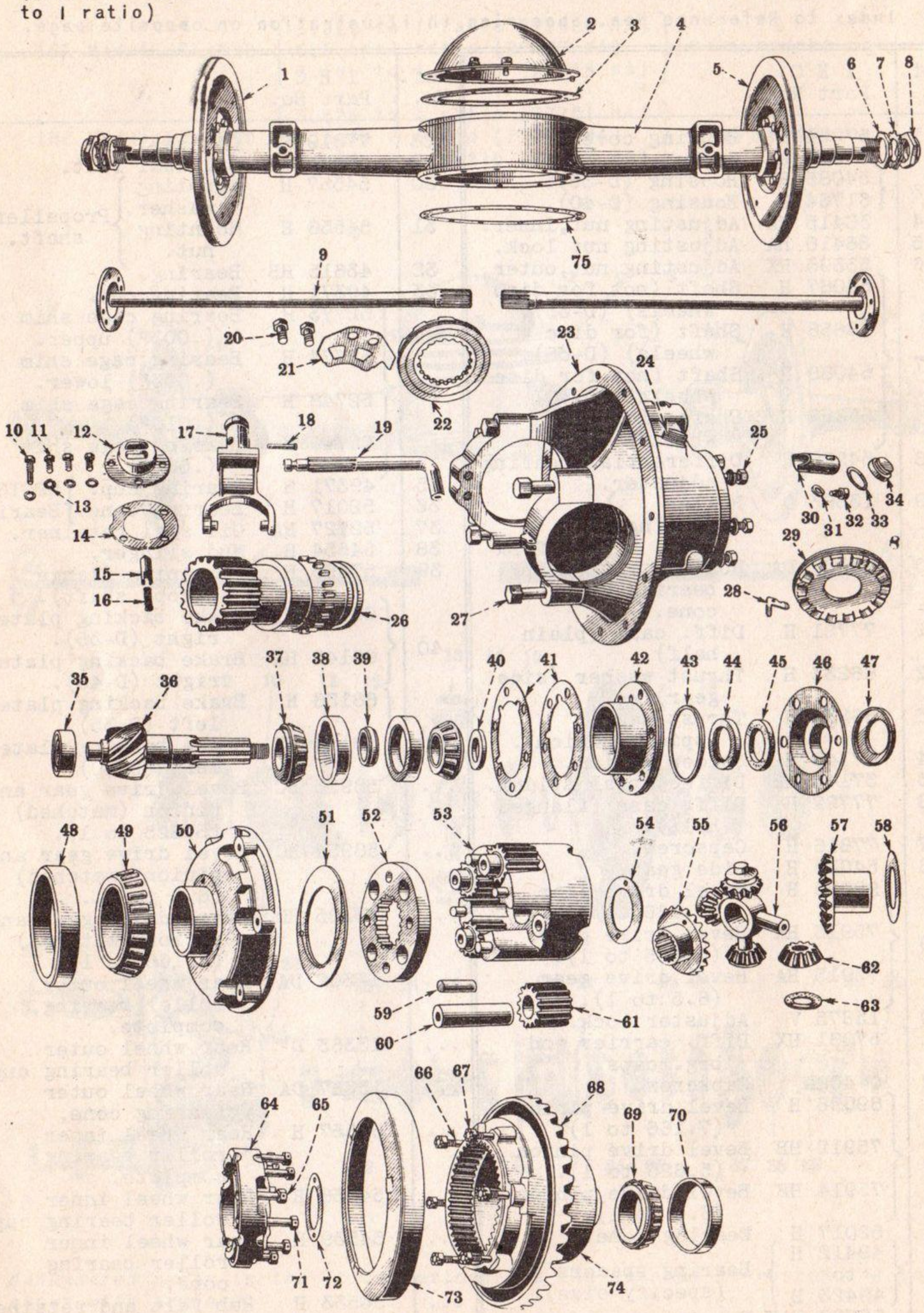
*When ordering, always use IHC Part Nos.* *See following page.*

REAR AXLE AND DIFFERENTIAL (D-35 and D-40 Trucks only) - Continued

Index to Reference Nos. appearing in illustration on opposite page.

| Ref. No. | I H C Part No. | | Ref. No. | I H C Part No. | |
|---|---|---|---|---|---|
| 1 | 57254 H | Housing cover. | 28 | 77819 H | Oil seal. |
| 2 | 57255 H | Gasket. | 29 | 59871 H | Oil seal felt. |
| 3 | 54085 H | Housing (D-35). | 30 | 54557 H | Mounting washer. (Propeller shaft.) |
| | 61764 H | Housing (D-40). | 31 | 54556 H | Mounting nut. (Propeller shaft.) |
| 4 | 36415 HA | Adjusting nut, inner. | 32 | 43615 HB | Bearing. |
| 5 | 36416 HA | Adjusting nut lock. | 33 | 49371 H | Bearing cup. |
| 6 | 53395 HX | Adjusting nut, outer. | 34 | 52773 H | Bearing cage shim (.003") upper. |
| 7 | 54087 H | Shaft (not for disc wheels) (D-35). | | 52774 H | Bearing cage shim (.003") lower. |
| | 58658 H | Shaft (for disc wheels) (D-35). | | 52748 H | Bearing cage shim (.010"). |
| | 54088 H | Shaft (not for disc wheels) (D-40). | | 52749 H | Bearing cage shim (.032"). |
| | 58662 H | Shaft (for disc wheels) (D-40). | 35 | 49371 H | Bearing cup. (52016 H Bearing) |
| 8 | 54528 H | Differential bearing adjuster. | 36 | 52017 H | Bearing cone. (52016 H Bearing) |
| 9 | 13363 D | Roller bearing cup. (13362 DA Bearing.) | 37 | 52727 HA | Oil seal retainer. |
| 10 | 13367 DA | Roller bearing cone. (13362 DA Bearing.) | 38 | 54554 H | Mud slinger. |
| 11 | 77721 H | Diff. case (plain half). | 39 | 57093 H | Companion flange (prop. shaft). |
| 12 | 86233 H | Thrust washer (side gear). | 40 | 68135 H | Brake backing plate, right (D-35). |
| 13 | 86232 H | Thrust washer (spider pinion). | | 68143 HX | Brake backing plate, right (D-40). |
| 14 | 37143 H | Spider pinion. | 41 | 68136 H | Brake backing plate, left (D-35). |
| 15 | 37144 HB | Differential spider. | | 68144 HX | Brake backing plate, left (D-40). |
| 16 | 77722 H | Diff. case (flanged half). | ... | 58953 HC | Bevel drive gear and pinion (matched) (5.625 to 1). |
| 17 | 77816 H | Capscrew. | ... | 58954 HC | Bevel drive gear and pinion (matched) (6.5 to 1). |
| 18 | 54039 H | Side gear. | ... | 73105 HD | Bevel drive gear and pinion (matched) (7.166 to 1). |
| 19 | 89095 H | Bevel drive gear (7.166 to 1). | ... | 13362 DA | Rear wheel outer roller bearing, complete. |
| | 75913 HA | Bevel drive gear (5.625 to 1). | ... | 13363 D | Rear wheel outer roller bearing cup. |
| | 75915 HA | Bevel drive gear (6.5 to 1). | ... | 13367 DA | Rear wheel outer bearing cone. |
| 20 | 13875 V | Adjuster lock. | ... | 54537 H | Rear wheel inner roller bearing complete. |
| 21 | 57091 HX | Diff. carrier and brg. caps. | ... | 54538 H | Rear wheel inner roller bearing cup. |
| 22 | Q 4060 | Capscrew. | ... | 54539 H | Rear wheel inner roller bearing cone. |
| 23 | 89096 H | Bevel drive pinion (7.166 to 1). | ... | 54533 H | Hub felt and retainer assy. |
| | 75912 HB | Bevel drive pinion (5.625 to 1). | | | |
| | 75914 HB | Bevel drive pinion (6.5 to 1). | | | |
| 24 | 52017 H | Bearing cone. | | | |
| 25 | 49412 H to 49423 H | Bearing spacers (specify size). | | | |
| 26 | 52728 HAX | Bearing cage. | | | |
| 27 | 49392 H | Bearing cage cork. | | | |

## TWO-SPEED REAR AXLE AND DIFFERENTIAL (IHC Model R-2430) (DS-35 Trucks only) (89542 H - 5.14 to 1 ratio) (89549 H - 6.33 to 1 ratio) (91974 H - 5.83 to 1 ratio)




*When ordering, always use I H C Part Nos.*

*Don't order parts from the illustrations only; refer to the list also.*

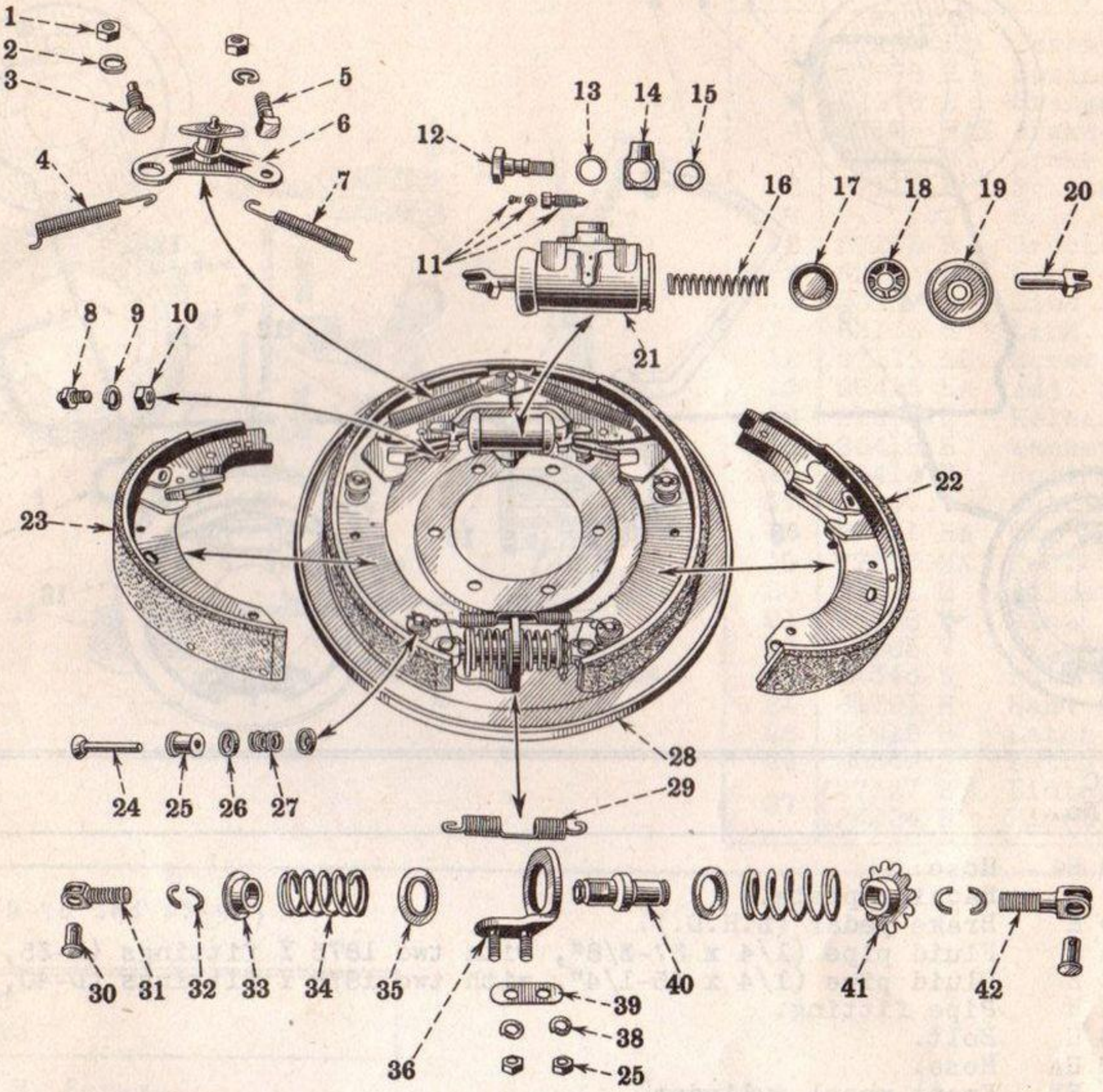
# TWO-SPEED REAR AXLE AND DIFFERENTIAL (IHC Model RX-2410) (DS-40 Trucks) (81234 H - 5.625 to 1 ratio) (81237 H - 6.143 to 1 ratio)




*When ordering, always use I H C Part Nos.*

*Don't order parts from the illustrations only; refer to the list also.*

## REAR WHEEL BRAKES AND CYLINDERS



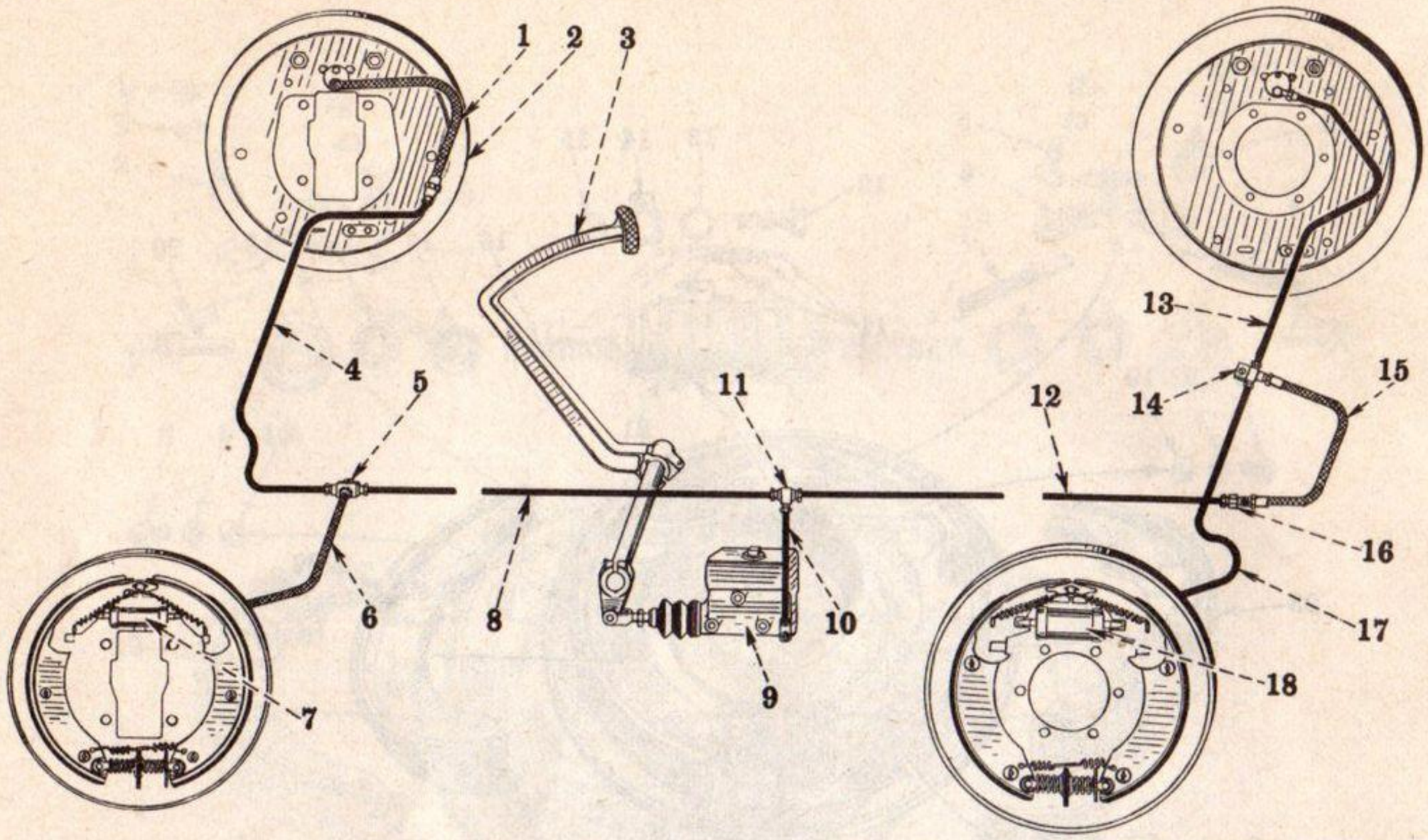

*Unnumbered parts in the illustrations are the same as corresponding parts shown with numbers.*

*When ordering, always use I H C Part Nos.*

| Ref. No. | I H C Part No. D-35, DS-35 | I H C Part No. D-40, DS-40 | | Ref. No. | I H C Part No. D-35, DS-35 | I H C Part No. D-40, DS-40 | |
|---|---|---|---|---|---|---|---|
| 1 | 48818 H | 48818 H | Anchor bolt nut. | 23 | 69397 HX | 69463 HX | Primary shoe and lining (standard). |
| 2 | ..... | ..... | Lockwasher, 3/4". | .. | 69446 H | 69461 H | Set - 2 shoes - left wheel (standard). |
| 3 | 69409 H | 69409 H | Eccentric bolt. | .. | 69447 H | 69462 H | Set - 2 shoes - right wheel (standard). |
| 4 | 69412 H | 69484 H | Primary shoe spring. | 24 | 69407 H | 69407 H | Shoe hold-down pin. |
| 5 | 49147 H | 49147 H | Plain bolt. | 25 | 69479 H | 69479 H | Spacer. |
| 6 | 69402 HX | 69402 HX | Anchor bracket. | 26 | 69114 H | 69114 H | Shoe hold-down cup. |
| 7 | 69587 H | 69621 H | Secondary shoe spring. | 27 | 75745 H | 75745 H | Shoe hold-down spring. |
| 8 | 69406 H | 69406 H | Connecting link stop. | 28 | 68135 H | 68143 HX | Backing plate, right. |
| 9 | ..... | ..... | Lockwasher, 1/2". | | 68136 H | 68144 HX | Backing plate, left. |
| 10 | ..... | ..... | Nut, 1/2"-20 N.F. | 29 | 69376 H | 69482 H | Shoe spring. |
| 11 | 48819 H | 48819 H | Bleeder screw. | 30 | 49064 H | 49183 H | Pivot pin. |
| 12 | 48121 H | 48121 H | Inlet fitting screw. | 31 | 69372 H | 69477 H | Adj. screw, left. |
| 13 | 48122 H | 48122 H | Gasket. | 32 | 69371 H | 69476 H | Retainer lock. |
| 14 | 48168 H | 48168 H | Inlet fitting. | 33 | 69369 H | 69474 H | Outer retainer. |
| 15 | 48123 H | 48123 H | Gasket. | 34 | 69368 H | 69473 H | Centralizer spring. |
| 16 | 49151 H | 49175 H | Piston spring. | 35 | 69367 H | 69472 H | Inner retainer. |
| 17 | 49150 H | 49174 H | Cylinder cup. | 36 | 69404 HX | 69469 HX | Centralizer bracket. |
| 18 | 49149 H | 49173 H | Cylinder piston. | 37 | 49666 H | 18352 D | Nut. |
| 19 | 51909 H | 57878 H | Cylinder boot. | 38 | x | ..... | Lockwasher, 3/8". |
| 20 | 69410 H | 69483 H | Connecting link. | | ..... | x | Lockwasher, 1/2". |
| 21 | 53436 HX | 53437 HX | Cylinder body. | 39 | 69375 H | 69481 H | Plate. |
| | 49148 HX | 49172 HAX | Cylinder, complete. | 40 | 69366 H | 69471 H | Adj. screw nut. |
| | 69444 H | 69465 HX | Secondary shoe and lining, left (standard). | 41 | 69370 H | 69475 H | Adj. screw wheel. |
| 22 | 69445 H | 69466 HX | Secondary shoe and lining, right (standard). | 42 | 69373 H | 69478 H | Adj. screw, right. |
| | | | | .. | 77932 HX | 48830 HBX | Brake drum. |
| | | | | .. | 43271 H | 43271 H | Brake drum bolt. |

***Don't order parts from the illustrations only; refer to the list also.***

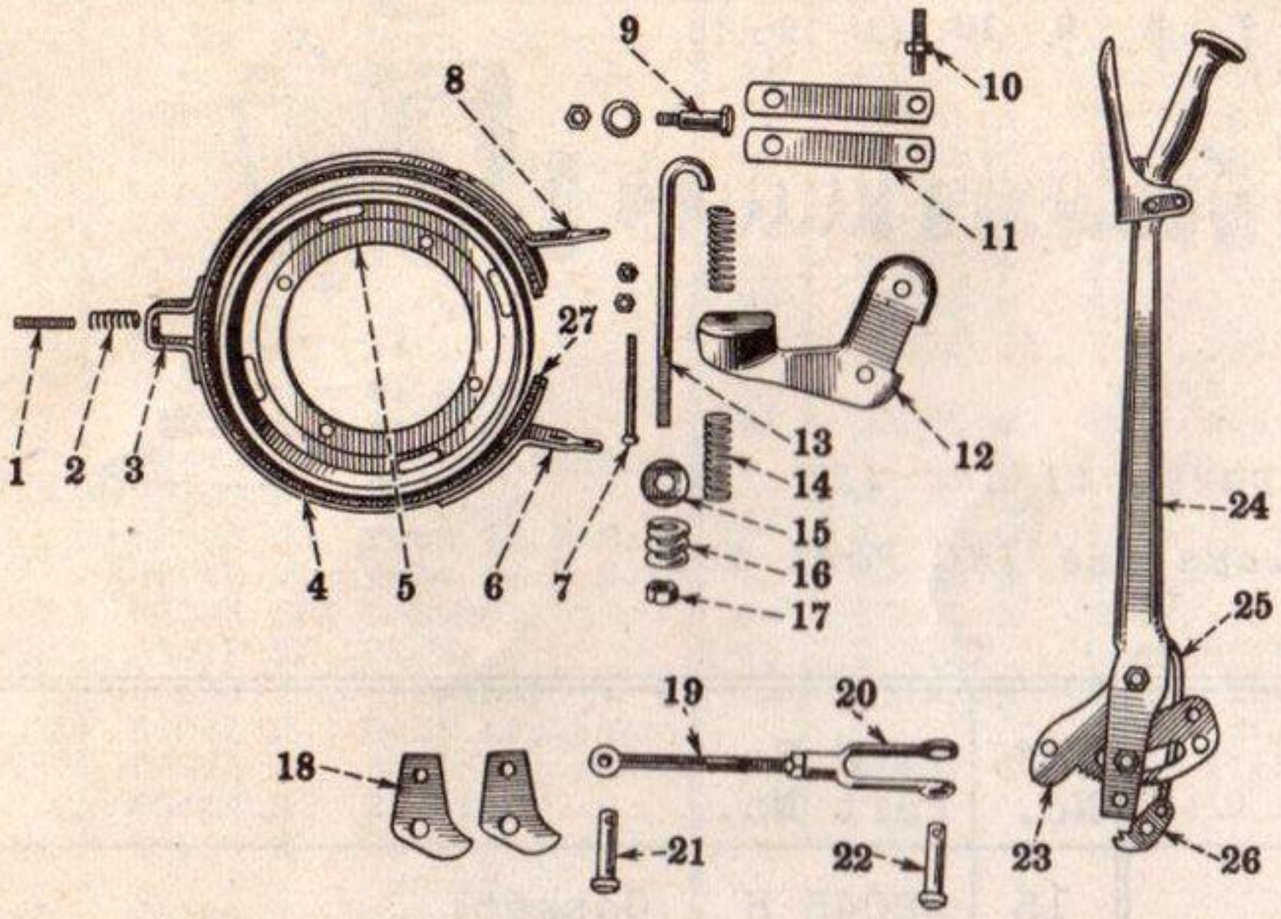
## HYDRAULIC BRAKE CONTROL




| Ref. No. | I H C Part No. | | |
|---|---|---|---|
| 1 | 48150 HA | Hose. | |
| 2 | ..... | Backing plate. | |
| 3 | 62750 H | Brake pedal (L.H.D.). | |
| 4 | 63464 H | Fluid pipe (1/4 x 37-3/8", with two 1875 Y fittings | (D-35, DS-35). |
| | 63595 H | Fluid pipe (1/4 x 45-1/4", with two 1875 Y fittings | (D-40, DS-40). |
| 5 | 48181 H | Pipe fitting. | |
| | 48183 H | Bolt. | |
| 6 | 48150 HA | Hose. | |
| 7 | 52201 HX | Front wheel cylinder. | |
| 8 | 63463 H | Fluid pipe (5/16 x 49-5/8", with two 29020 H fittings | (D-35, DS-35). |
| | 63593 HA | Fluid pipe (5/16 x 45-5/8", with two 29020 H fittings | (D-40, DS-40). |
| 9 | 68360 H | Master cylinder. | |
| 10 | 63457 H | Fluid pipe. | |
| 11 | 62606 H | T-connection. | |
| 12 | 63458 H | Fluid pipe (5/16 x 133-7/16", with two 29020 H fittings) 179" W.B. | D-35, DS-35 |
| | 63459 H | Fluid pipe (5/16 x 115-7/16", with two 29020 H fittings) 161" W.B. | |
| | 63460 H | Fluid pipe (5/16 x 103-7/16", with two 29020 H fittings) 149" W.B. | |
| | 63461 H | Fluid pipe (5/16 x 91-7/16", with two 29020 H fittings) 137" W.B. | |
| | 63600 H | Fluid pipe (5/16 x 135", with two 29020 H fittings) | 176" W.B. |
| | 63601 H | Fluid pipe (5/16 x 117", with two 29020 H fittings) | 158" W.B. D-40, |
| | 63602 H | Fluid pipe (5/16 x 105", with two 29020 H fittings) | 146" W.B. DS-40 |
| | 63603 H | Fluid pipe (5/16 x 95", with two 29020 H fittings) | 134" W.B. |
| 13 | 90062 H | Fluid pipe (1/4 x 35-7/8", with two 48151 H fittings) | (DS-35). |
| | 63462 H | Fluid pipe (1/4 x 37-3/4", with two 1875 Y fittings) | (D-35). |
| | 63596 H | Fluid pipe (1/4 x 39-1/4", with two 1875 Y fittings) | (D-40). |
| | 81537 H | Fluid pipe (1/4 x 40-7/16", with two 1875 Y fittings) | (DS-40). |
| 14 | 48156 H | T-connection. | |
| 15 | 48150 HA | Hose. | |
| 16 | 48158 H | Hose union. | |
| 17 | 63592 H | Fluid pipe (1/4 x 30", with two 1875 Y fittings) | (D-40). |
| | 81536 H | Fluid pipe (1/4 x 31-13/16", with two 1875 Y fittings) | (DS-40). |
| | 90063 H | Fluid pipe (1/4 x 28-1/2", with two 48151 H fittings) | (DS-35). |
| | 63456 H | Fluid pipe (1/4 x 28-1/2", with two 1875 Y fittings) | (D-35). |
| 18 | 49148 HX | Rear wheel cylinder (D-35, DS-35). | |
| | 49172 HAX | Rear wheel cylinder (D-40, DS-40). | |
| ... | 62751 H | Brake pedal (R.H.D.). | |
| ... | 63465 H | Fluid pipe (5/16 x 57-1/16", with two 29020 H fittings) frame conn. to conn., R.H.D. (D-35, DS-35). | |
| ... | 63594 H | Fluid pipe (5/16 x 57-15/16", with two 29020 H fittings) frame conn. to conn., R.H.D. (D-40, DS-40). | |

*Don't order parts from the illustrations only; refer to the list also.*

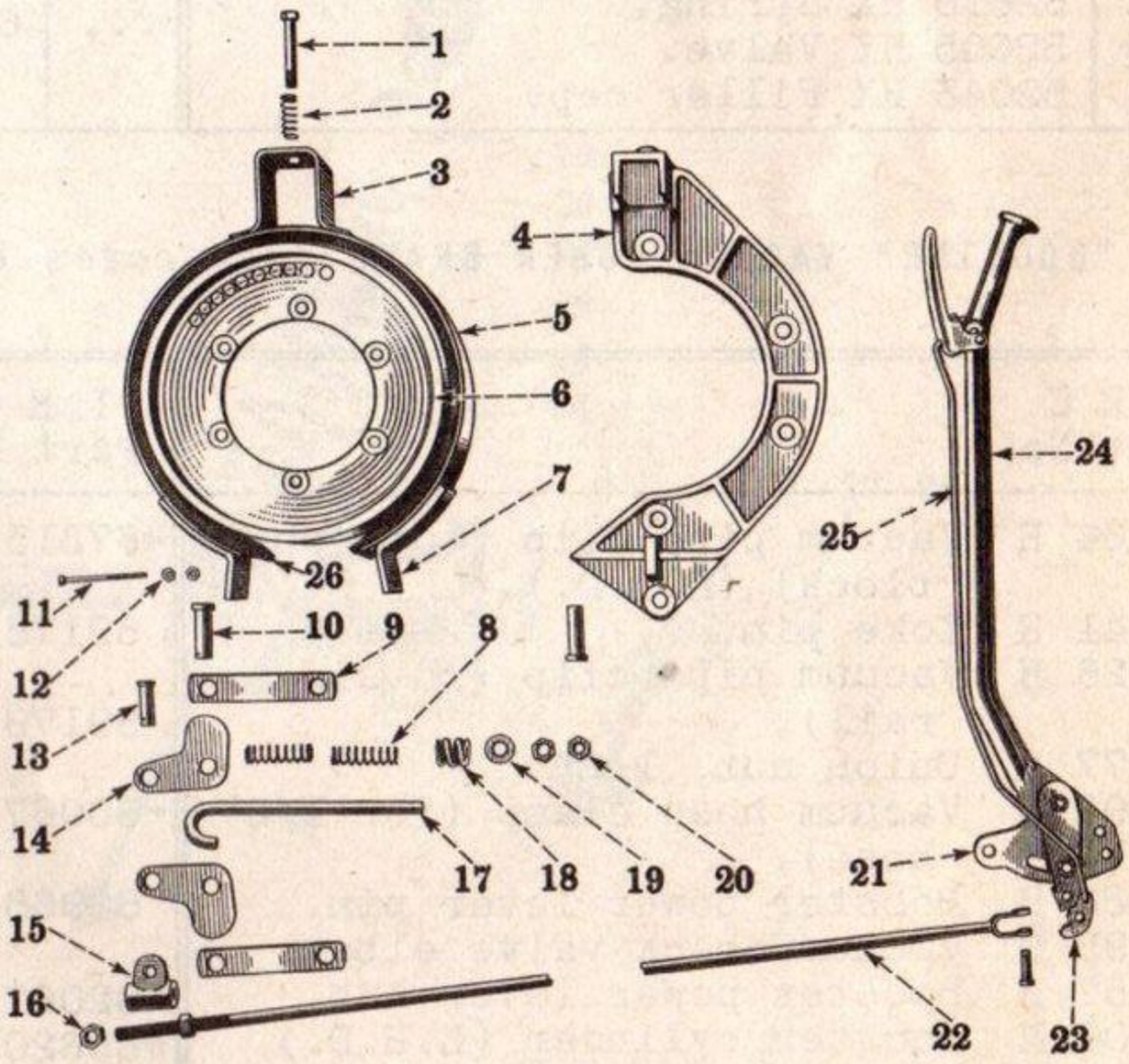
## HAND BRAKE (D-35 and DS-35)




| Ref. No. | I H C Part No. | |
|---|---|---|
| 1 | 27102 H | Screw. |
| 2 | 21978 H | Spring. |
| 3 | 21976 H | Bracket. |
| 4 | 27125 HAX | Brake band. |
| 5 | 27239 H | Brake drum. |
| 6 | 27114 H | Bracket,lower. |
| 7 | ..... | Bolt. |
| 8 | 27113 H | Bracket,upper. |
| 9 | 63154 H | Link bolt. |
| 10 | 63157 H | Link stud. |
| 11 | 63156 H | Link. |
| 12 | 27115 HB | Screw bracket. |
| 13 | 26415 HA | Adj. bolt. |
| 14 | 21983 H | Release spring. |
| 15 | 26413 H | Washer. |
| 16 | 26414 H | Spring. |
| 17 | ..... | Nut,1/4"-20 N.C. |
| 18 | 27101 HA | Cam lever. |
| 19 | 77313 HX | Rod. |
| 20 | 77321 H | Adjustable yoke. |
| 21 | 74158 H | Pin. |
| 22 | 10765 V | Pin. |
| 23 | 62348 H | Ratchet. |
| 24 | 61791 H | Hand lever. |
| 25 | 64919 H | Latch rod. |
| 26 | 62349 H | Latch. |
| 27 | 27127 H | Lining. |
| | 26304 H | Rivet. |

## HAND BRAKE (D-40 and DS-40)

| Ref. No. | I H C Part No. | |
|---|---|---|
| 1 | 36434 H | Screw. |
| 2 | 36436 H | Spring. |
| 3 | 36439 H | Bracket. |
| 4 | 63258 H | Support bracket. |
| 5 | 63252 H | Brake band. |
| 6 | 63256 H | Brake drum. |
| 7 | 38304 HA | End bracket. |
| 8 | 38301 H | Spring. |
| 9 | 63220 H | Spacer link. |
| 10 | 63255 H | Pin. |
| 11 | ------ | 1/4 x 3" Mach. screw. |
| 12 | ------ | 1/4" Hex. nut. |
| 13 | 15041 H | Pin. |
| 14 | 36438 H | Cam lever. |
| 15 | 63275 H | Swivel. |
| 16 | ------ | 1/2" Hex.nut. |
| 17 | 38302 H | Bolt. |
| 18 | 26414 H | Spring. |
| 19 | ------ | 17/32 x 1 1/4" washer. |
| 20 | ------ | 1/2" Hex. nut. |
| 21 | 62348 H | Ratchet. |
| 22 | 63313 HX | Rod (134",146", 158"W.B.). |
| | 63314 HX | Rod (176" W.B.) |
| 23 | 62349 H | Latch. |
| 24 | 61791 H | Hand lever. |
| 25 | 64919 H | Latch rod. |
| 26 | 63251 H | Lining. |
| | 21407 H | Rivet. |



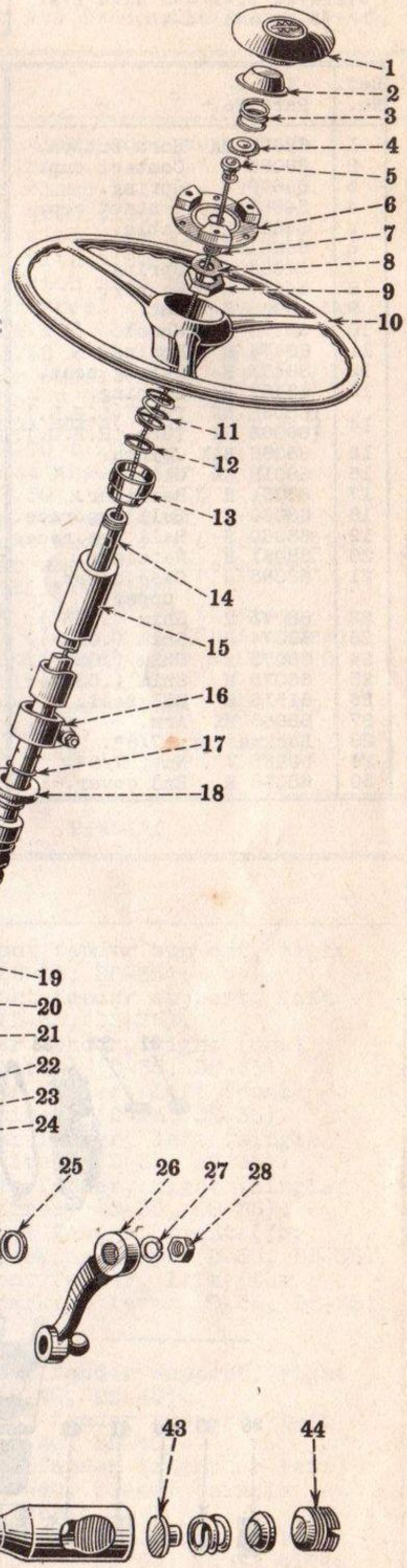

*When ordering, always use IHC Part Nos.*

***Don't order parts from the illustrations only; refer to the list also.***

## STEERING GEAR AND DRAG LINK (D-35 and DS-35)

{ 64997 HA - Left Hand Drive
{ 64998 HA - Right Hand Drive

| Ref. No. | I H C Part No. | |
|---|---|---|
| 1 | 68024 HA | Horn button. |
| 2 | 68025 H | Contact cup. |
| 3 | 54679 H | Spring. |
| 4 | 54681 HA | Contact cap. |
| 5 | 54686 HB | Cable. |
| 6 | 68051 HAX | Plate. |
| 7 | 54683 H | Spring. |
| 8 | 54677 H | Washer. |
| 9 | 56949 H | Nut. |
| 10 | 65178 H | Wheel. |
| 11 | 88474 H | Spring. |
| 12 | 88473 H | Spring seat. |
| 13 | 88467 H | Bearing. |
| 14 | 68039 HA | Tube (L.H.D.). |
| | 68040 HA | Tube (R.H.D.). |
| 15 | 68043 HAX | Column. |
| 16 | 68012 HX | Clamp. |
| 17 | 50448 H | Retainer. |
| 18 | 68041 H | Ball brg.race. |
| 19 | 68041 H | Ball brg.race. |
| 20 | 50448 H | Retainer. |
| 21 | 68010 H | Case cover, upper. |
| 22 | 68020 H | Shim (.003"). |
| 23 | 68021 H | Shim (.010"). |
| 24 | 68022 H | Shim (.030"). |
| 25 | 81516 H | Oil seal. |
| 26 | 68045 HX | Arm. |
| 27 | Lockwasher, 7/8". | |
| 28 | 50865 V | Nut. |
| 29 | 68004 HX | End cover. |
| 30 | 68016 H | Nut. |
| 31 | 68298 H | Adj. screw. |
| 32 | 68047 HX | Side cover. |
| 33 | 68050 H | Gasket. |
| 34 | 68044 HX | Lever shaft. |
| 35 | 68031 H | Bushing. |
| 36 | 68032 H | Bushing. |
| 37 | 68029 HAX | Case (L.H.D.). |
| | 68030 HAX | Case (R.H.D.). |
| 38 | 26938 H | Plug. |
| 39 | 26936 H | Spring. |
| 40 | 59812 HA | Ball seat, outer. |
| 41 | 65000 H | Ball seat, inner. |
| 42 | 63152 HX | Link (L.H.D.). |
| | 63153 HX | Link (R.H.D.). |
| 43 | 26940 H | Plug. |
| 44 | 65001 H | Plug. |
| 45 | Q 3621 | Grease fitting. |
| ... | 66641 H | Drag link dust shield. |
| ... | 66642 H | Drag link dust shield felt. |



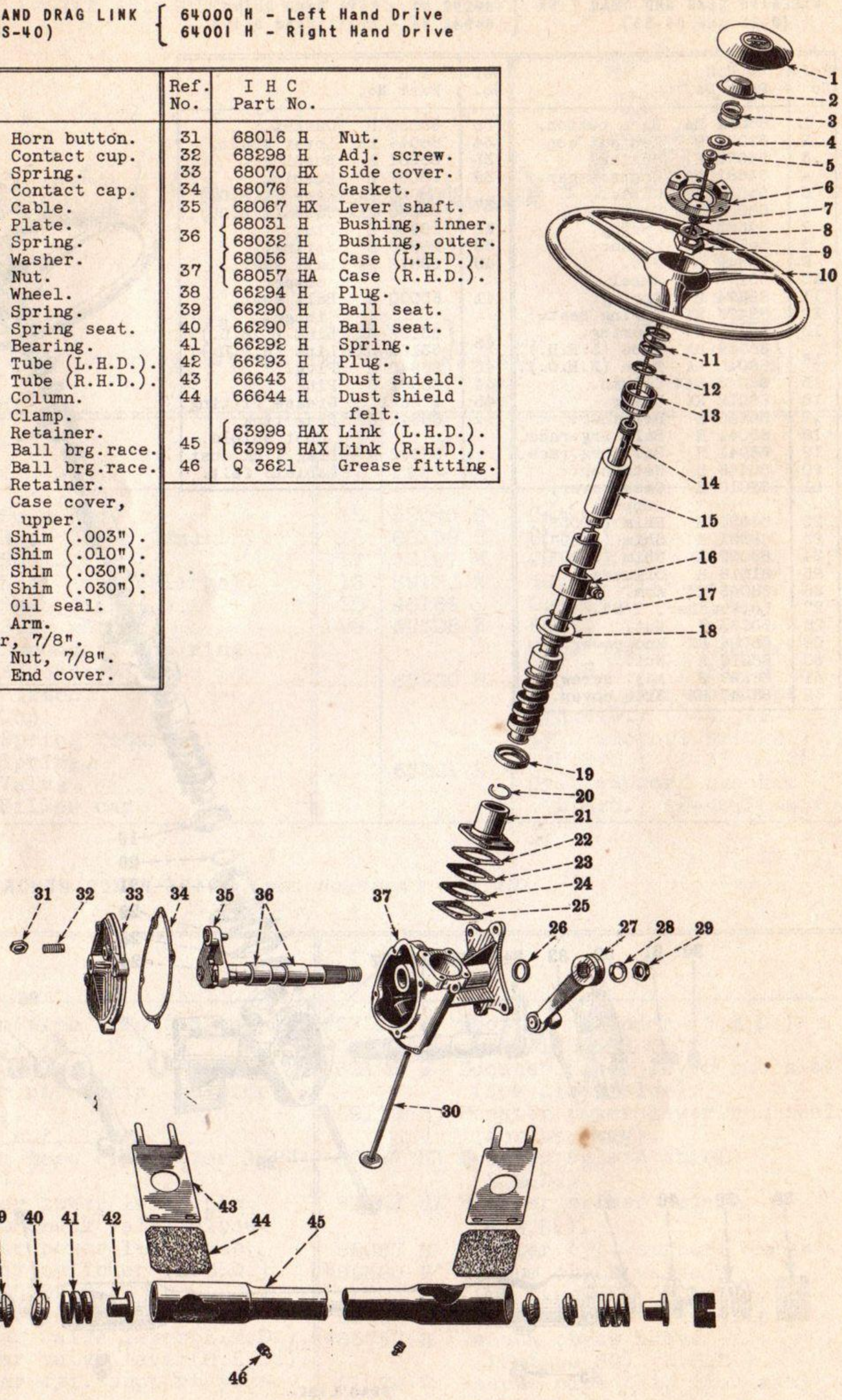

DRAG LINK

*Don't order parts from the illustrations only; refer to the list also.*

## STEERING GEAR AND DRAG LINK (D-40 and DS-40)

64000 H - Left Hand Drive
64001 H - Right Hand Drive

| Ref. No. | I H C Part No. | |
|---|---|---|
| 1 | 68024 HA | Horn button. |
| 2 | 68025 H | Contact cup. |
| 3 | 54679 H | Spring. |
| 4 | 54681 HA | Contact cap. |
| 5 | 54686 HB | Cable. |
| 6 | 68051 HAX | Plate. |
| 7 | 54683 H | Spring. |
| 8 | 54677 H | Washer. |
| 9 | 56949 H | Nut. |
| 10 | 65178 H | Wheel. |
| 11 | 88474 H | Spring. |
| 12 | 88473 H | Spring seat. |
| 13 | 88467 H | Bearing. |
| 14 | 68062 HX | Tube (L.H.D.). |
| | 68063 HX | Tube (R.H.D.). |
| 15 | 68066 HAX | Column. |
| 16 | 68012 HX | Clamp. |
| 17 | 68061 H | Retainer. |
| 18 | 68060 H | Ball brg.race. |
| 19 | 68060 H | Ball brg.race. |
| 20 | 68061 H | Retainer. |
| 21 | 68065 H | Case cover, upper. |
| 22 | 68073 H | Shim (.003"). |
| 23 | 68074 H | Shim (.010"). |
| 24 | 68075 H | Shim (.030"). |
| 25 | 68075 H | Shim (.030"). |
| 26 | 81516 H | Oil seal. |
| 27 | 68068 HX | Arm. |
| 28 | Lockwasher, 7/8". | |
| 29 | 50865 V | Nut, 7/8". |
| 30 | 68058 H | End cover. |
| 31 | 68016 H | Nut. |
| 32 | 68298 H | Adj. screw. |
| 33 | 68070 HX | Side cover. |
| 34 | 68076 H | Gasket. |
| 35 | 68067 HX | Lever shaft. |
| 36 | 68031 H | Bushing, inner. |
| | 68032 H | Bushing, outer. |
| 37 | 68056 HA | Case (L.H.D.). |
| | 68057 HA | Case (R.H.D.). |
| 38 | 66294 H | Plug. |
| 39 | 66290 H | Ball seat. |
| 40 | 66290 H | Ball seat. |
| 41 | 66292 H | Spring. |
| 42 | 66293 H | Plug. |
| 43 | 66643 H | Dust shield. |
| 44 | 66644 H | Dust shield felt. |
| 45 | 63998 HAX | Link (L.H.D.). |
| | 63999 HAX | Link (R.H.D.). |
| 46 | Q 3621 | Grease fitting. |




DRAG LINK

*Don't order parts from the illustrations only; refer to the list also.*

## FRONT CHASSIS SPRINGS (D-35, DS-35)

| I H C Part No. | |
|---|---|
| Q 3615 | Grease fitting (for 63199 H pins). |
| 25427 H | Pin for 64321 HX clip (not Export). |
| 54321 H | Center bolt (Export only). |
| 63197 H | Rubber bumper. |
| 63198 H | Rubber bumper retainer. |
| 63199 H | Pin - front and rear end of spring. |
| 63200 H | Shackle, outer. |
| 63201 H | Shackle, inner. |
| 63202 HX | U-bolt, complete (not Export). |
| 63204 HB | Spring, complete (11 leaves) (not Export). |
| 63941 HX | Bracket, front, (not for trucks with tow hooks). |
| 63942 H | Bushing for 63941 HX bracket. |
| 63943 H | Bracket, rear. |
| 64320 HX | Clip (bolt type) on tenth leaf (not Export). |
| 64321 HX | Clip (pin type) on sixth leaf (not Export). |
| 66208 HX | U-bolt, complete (Export only). |
| 68985 HX | Clip (bolt type) on twelfth leaf (Export only). |
| 69885 H | Center bolt (not Export). |
| 71561 H | Wedge plate (1/2°). |
| 71562 H | Wedge plate (1°). |
| 71563 H | Wedge plate (1-1/2°). |
| 83465 H | Spring, complete (13 leaves) (Export only). |
| 84465 H | Clip (pin type) on seventh leaf (Export only). |
| 84655 H | Two 83465 H springs (Export only). |
| 13017 V | Bushing for ends of spring. |
| 50220 V | Nut for U-bolt. |
| 50633 V | Clip spacer. |
| 51047 V | Tension plate. |

## FRONT CHASSIS SPRINGS (D-40, DS-40)

| I H C Part No. | |
|---|---|
| Q 3621 | Grease fitting (for 57687 H and 63236 H pins). |
| 5436 H | Bushing for ends of spring. |
| 17546 H | Center bolt (Export only). |
| 19230 H | Front spring riser block dowel (for 9.00 x 20 tires). |
| 24675 HX | Front spring U-bolt, complete (not Export) (for 9.00 x 20 tires). |
| 25429 H | Pin for 51299 VAX (not Export). |
| 57687 H | Pin for rear end of spring. |
| 59071 H | Tension plate. |
| 63236 H | Pin for front end of spring. |
| 63238 HB | Spring, complete (11 leaves) (not Export). |
| 63241 H | Seat for U-bolt. |
| 63249 H | Shackle. |
| 63967 HA | Bracket, rear. |
| 63971 HX | Bracket, front, right (not for trucks with tow hooks). |
| 63972 HX | Bracket, front, left (not for trucks with tow hooks). |
| 64007 H | Bushing for front brackets. |
| 64322 HX | Clip (bolt type) on ninth leaf (not Export). |
| 71564 H | Wedge plate (1/2°). |
| 71565 H | Wedge plate (1°). |
| 71566 H | Wedge plate (1-1/2°). |
| 72034 HX | U-bolt, complete (Export only) (not for 9.00 x 20 tires). |
| 74568 HX | U-bolt, complete (Export only) (for 9.00 x 20 tires). |
| 83462 H | Spring, complete (14 leaves) (Export only). |
| 84462 HX | Clip (bolt type) on twelfth leaf (Export only). |
| 84463 HX | Clip (pin type) on seventh leaf (Export only). |
| 84658 H | Two 83462 H springs (Export only). |
| 84768 H | Front spring riser block (for 9.00 x 20 tires). |
| 10521 VB | Center bolt (not Export). |
| 21484 VX | U-bolt, complete (not Export). (not for 9.00 x 20 tires). |
| 50003 V | Rubber bumper. |
| 50220 V | Nut for U-bolt. |
| 50632 V | Clip spacer. |
| 51299 VAX | Clip (pin type) on fifth leaf (not Export). |

## AUXILIARY REAR SPRINGS (D-35, DS-35)

| I H C Part No. | |
|---|---|
| 29203 H | Spring seat. |
| 51912 HA | Bracket. |
| 63205 H | Spring, complete (8 leaves) (not Export). |
| 64328 H | Clip (clinch type) on fourth leaf (not Export). |
| 83466 H | Spring, complete (9 leaves) (Export only). |
| 84466 H | Clip (clinch type) on fifth leaf (Export only). |
| 84657 H | Two 83466 H springs (Export only). |
| 10516 VA | Center bolt (not Export). |
| 10519 V | Center bolt (Export only. |

## AUXILIARY REAR SPRINGS (D-40, DS-40)

| I H C Part No. | |
|---|---|
| 36941 HB | Bracket. |
| 63229 H | Spring, complete (8 leaves) (not Export). |
| 64329 H | Clip (clinch type) on fourth leaf (not Export). |
| 83464 H | Spring, complete (9 leaves) (Export only). |
| 84464 H | Clip (clinch type) on fifth leaf (Export only). |
| 84660 H | Two 83464 H springs (Export). |
| 10519 V | Center bolt (Export only). |
| 10521 V | Center bolt (not Export). |

| REAR CHASSIS SPRINGS (D-35, DS-35) | | REAR CHASSIS SPRINGS (D-40, DS-40) | |
|---|---|---|---|
| I H C Part No. | Description | I H C Part No. | Description |
| Q 3615 | Grease fitting (for 63194 H and 63195 H pins). | Q 3615 | Grease fitting (for 63235 H and 63237 H pins). |
| 8481 HA | Center bolt (Export only). | 17636 H | Center bolt (Export only). |
| 17546 H | Center bolt (not Export). | 18139 H | Pin for 71821 HX clip (Export). |
| 25429 H | Pin for 73533 HX (Export only). | 19323 HX | Clip (bolt type) on fourth leaf (not Export). |
| 54079 H | Seat for U-bolt. | 37680 HX | U-bolt, complete (DS-40) (Export). |
| 54080 H | Plate for U-bolt. | 54063 H | Seat for U-bolt (D-40). |
| 57051 HX | U-bolt, complete (not Export). | 54065 H | Plate for U-bolt (D-40). |
| 59071 H | Tension plate (Export only). | 55192 HX | U-bolt, complete (not Export) (D-40). |
| 63194 H | Pin for rear end of spring, lower. | 55193 H | Plate for U-bolt (DS-40). |
| | Pin for front end of spring. | 55208 H | Spring seat (DS-40). |
| 63195 H | Pin for rear end of spring, upper. | 55602 H | Bushing for ends of spring. |
| | | 59694 H | Seat dowel (DS-40). |
| | | 63235 H | Pin for rear end of spring. |
| | | 63237 H | Pin for front end of spring. |
| 63196 H | Shackle bushing. | 63240 H | Spring, complete (11 leaves) (not Export). |
| 63203 HX | Shackle with bushings. | 63242 H | Shackle cross shaft. |
| 63206 H | Spring, complete (10 leaves) (not Export). | 63243 HX | Shackle with bushings. |
| 63944 H | Bracket for front and rear end of spring (not Export). | 63244 H | Shroud (not Export). |
| | | 63968 H | Bracket - front end of spring (not Export). |
| 64323 HX | Clip (bolt type) on fourth leaf (not Export). | 63970 H | Bracket - rear end of spring. |
| | | 71821 HX | Clip (pin type) on sixth leaf (Export only). |
| 64393 H | Bushing for ends of spring. | 80677 HX | Clip (bolt type) on eleventh leaf (Export only). |
| 73533 HX | Clip (pin type) on sixth leaf (Export only). | 81532 HX | U-bolt, complete (not Export) (DS-40). |
| 82508 H | Bracket for front and rear end of spring (Export only). | 82509 H | Bracket for front end of spring (Export only). |
| 82510 H | Capscrew, 1/2" x 1-3/8", for 82508 H. | 82511 H | Capscrew, 9/16" x 1-1/2", for 82509 H. |
| 82513 H | Capscrew, 1/2" x 1-5/8", for 82508 H. | 82512 H | Capscrew, 9/16" x 1-3/4", for 82509 H. |
| 82887 HX | U-bolt, complete (Export only). | 83463 H | Spring, complete (14 leaves) (Export only). |
| 83467 H | Spring, complete (15 leaves) (Export only). | 83800 HX | U-bolt, complete (D-40) (Export). |
| 84467 HX | Clip (bolt type) on twelfth leaf (Export only). | 84600 H | Shroud (Export only). |
| | | 84659 H | Two 83463 H springs (Export). |
| 84656 H | Two 83467 H springs (Export only). | 1712 V | Shackle cross shaft collar. |
| | | 30852 V | Center bolt (not Export). |
| | | 31161 VA | Bushing for shackles. |
| 50219 V | Nut for U-bolt. | 50219 V | Nut for U-bolt. |
| 50632 V | Clip spacer. | 50635 V | Clip spacer. |
| 51293 VX | Clip (bolt type) on ninth leaf (not Export). | 53087 V | Tension plate (Export only). |
| | | 53092 VX | Clip (bolt type) on ninth leaf (not Export). |

# GENERAL DATA

| ENGINE: | D-35, DS-35 | D-40, DS-40 |
|---|---|---|
| Model (IHC) | FAB-241 | FAB-259 |
| Number of Cylinders | 6 | 6 |
| Bore | 3⅜" | 3½" |
| Stroke | 4½" | 4½" |
| Piston Displacement (Cubic Inches) | 241.54 | 259.76 |
| Horsepower (A.M.A.) | 27.3 | 29.4 |

**ENGINE SERIAL NUMBER:**

Stamped on spark plug side of crankcase above valve tappet cover.

**CHASSIS SERIAL NUMBER AND WEIGHT:**

Stamped on capacity plate on left-hand side of cowl, under hood.

**TRANSMISSION SERIAL NUMBER:**

Stamped on back side of transmission case, below countershaft on D-35 and DS-35, and above drain plug on D-40 and DS-40.

**REAR AXLE SERIAL NUMBER:**

Stamped on left side of axle housing.

**WHEELBASE:**

137", 149", 161", 179" for D-35 and DS-35.
134", 146", 158", 176" for D-40 and DS-40

**UNIT CAPACITIES:**

Engine Oil (refill) ..... 6½ Quarts (U.S.)
Transmission ..... (D-35, DS-35—5½ Pints) (D-40, DS-40—14 Pints) (U.S.)
Rear Axle Differential { D-35, D-40 ..... 10 Pints (U.S.) / DS-35 ..... 14 Pints (U.S.) / DS-40 ..... 18 Pints (U.S.)
Cooling System ..... (D-35, DS-35—18¾ Quarts) (D-40, DS-40—21¾ Quarts) (U.S.)
Fuel Tank (under seat) ..... 21 Gallons (U.S.)

**TIRE PRESSURE:**

| | | | |
|---|---|---|---|
| *30 x 5 H.D. | 75 Pounds | *6.50 x 20 Balloon | 50 Pounds |
| 32 x 6 T.T. | 75 " | 7.00 x 20 Balloon | 55 " |
| 32 x 6 H.D | 80 " | 7.50 x 20 Balloon | 55 " |
| 34 x 7 H.D. | 85 " | 8.25 x 20 Balloon | 60 " |
| 36 x 8 H.D. | 90 " | 9.00 x 20 Balloon | 65 " |
| | | 9.75 x 20 Balloon | 70 " |

*D-35 and DS-35 only

# Important

The owner will aid in rendering prompt and efficient service, by a careful observance of the following:

1—When ordering parts, give the Chassis Serial Number.

2—Write the part number wanted exactly as shown in parts list.

3—Give definite shipping instructions; when ordering by telegraph, prepay, and give correct address.

☞ *So that you may have it before you, write the Model and Chassis No. and the unit numbers here—*

*Chassis Serial No.*_____ *Engine No.*_____

*Rear Axle No.*_____ *Transmission No.*_____

*Do not omit prefix or suffix letters appearing with numbers.*

PRINTED IN UNITED STATES OF AMERICA