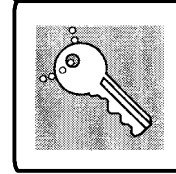
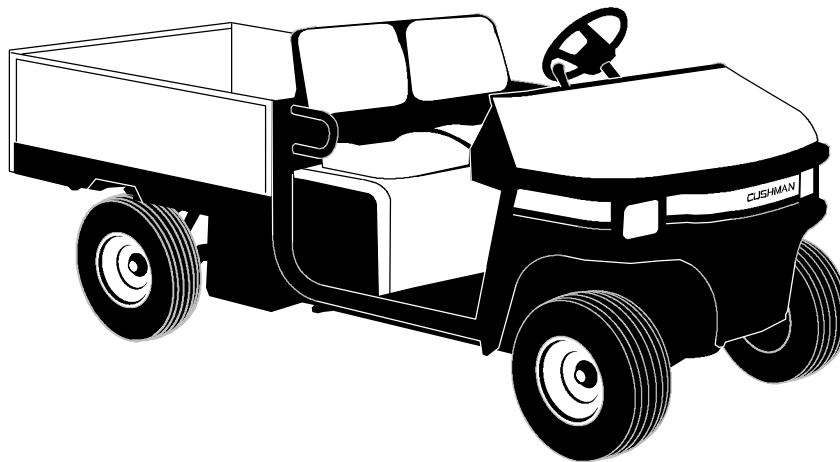


**CUSHMAN**  
A Textron Company

4120402



**PARTS &  
MAINTENANCE MANUAL**



**TURF-TRUCKS®**

**SUZUKI K6A LIQUID COOLED GASOLINE ENGINE MT**  
MODEL: 898627

**SUZUKI K6A LIQUID COOLED GASOLINE ENGINE AT**  
MODEL: 898628

**SUZUKI 970 LIQUID COOLED GASOLINE ENGINE**  
MODEL: 898671

**PERKINS LIQUID COOLED DIESEL ENGINE**  
MODEL: 898673  
EC MODEL: 898695

# Always Think Safety!

**Thank you** for purchasing a Cushman, Textron product. You are one of our many customers who have voted their confidence in our company by purchasing our products.

This is one of the best designed and built pieces of commercial industrial and turf equipment available. Many safety features have been designed and built into this product. Please **DO NOT remove or defeat any safety features** as they were installed for your protection.

The useful life and good service you obtain from your vehicle depends to a large extent on the way it is **maintained and operated**.

Treat your equipment properly, lubricate and adjust it as instructed in this manual and it will give you many years of reliable service.

See your Cushman, Textron dealer for service and parts. He stocks genuine Cushman, Textron parts manufactured with the same precision and skill as the original parts.

Cushman Inc., A Textron Company, reserves the right to make changes at any time, without notice, in specifications and models and also to discontinue models and the accessories designed to be used on these models. The right is also reserved to change specifications or parts at any time without incurring any obligation to equip same on models manufactured prior to date of such change.

While the information contained in this parts manual is based on the latest product information available at the time of publication, the continuing accuracy of this parts manual cannot be guaranteed.



## WARNING

- **When replacement parts are required, use genuine CUSHMAN parts or parts with equivalent characteristics including type, strength and material. Failure to do so may result in product malfunction and possible injury to the operator and/or bystanders.**

Illustrations in this manual are a reference guide for parts identification only. Since these illustrations may not depict actual positioning of component parts, they should not be used as an assembly diagram. Doing so may result in improper assembly leading to sudden failure.

## MODIFICATIONS AND ACCESSORIES

Factory installed modifications and accessories are available for use on this vehicle.

Read and understand all literature before attempting to operate this vehicle or any attached equipment.

### NOTICE

- Some vehicles may be equipped with special options that are not serviced by Cushman Textron.
- The addition of accessories not of manufacturer's design may result in erratic vehicle operation, improper battery charging and discharging, and failure of vehicle components.

Direct any inquiries to:

Customer Service Department  
P.O. Box 388  
Augusta, GA 30903-0388 USA



## WARNING

- **Altering this equipment in any manner which adversely affects the equipments operation, performance, durability or use, may cause hazardous conditions.**

### IMPORTANT!

THIS EQUIPMENT SHOULD NOT BE MODIFIED OR ADDED TO WITHOUT THE MANUFACTURER'S AUTHORIZATION.

## SPECIFICATION INFORMATION

All information contained in this manual is the latest available at the time of printing. Cushman Textron reserves the right to make changes at any time without notice.

### NOTICE

- After you identify a part by the reference number and the six digit cushman part number, ***always read the description of the part to be sure it is what you want.***

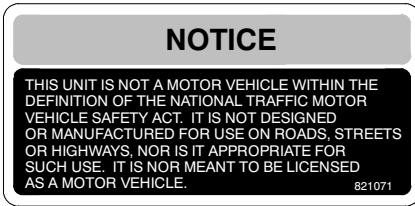
## STANDARDS AND PUBLICATIONS

This product meets requirements of ANSI B56.8 and has been approved by Factory Mutual Research Corporation to meet all Powered Industrial Truck portions (classification D or G) of the OSHA requirements (as stated in section 1910.178). Approved powered trucks shall bear a label or some other identifying mark indicating approval by the testing laboratory. This product conforms to EC directives and amendments: 89/392 & 91/368.

Users, operators and service persons should be familiar with the following standards and publications:  
(The material may be obtained from the addresses shown).

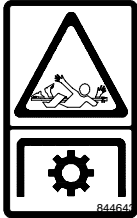
- **Factory Mutual Approval Standard:**  
Class No's. 7811 & 7813; Gasoline or Diesel Powered Trucks, Types G, GS, D or DS.  
**ADDRESS:**  
Factory Mutual Research Corp.  
1151 Boston-Providence Highway  
Norwood, Massachusetts 02062 U.S.A.
- **ANSI/NFPA #505; Powered Industrial Trucks.**  
**ADDRESS:**  
National Fire Prevention Association  
Batterymarch Park  
Quincy, Massachusetts 02269 U.S.A.
- **ANSI/ASME B56.8 Personnel Burden Carriers**  
**ADDRESS:**  
American National Standards Institute, Inc.  
1430 Broadway  
New York, New York 10018 U.S.A.
- **ANSI/UL 558; Internal Combustion Engine Powered Industrial Trucks**  
**ADDRESS:**  
American National Standards Institute, Inc.  
1430 Broadway  
New York, New York 10018 U.S.A.  
OR  
Underwriters Laboratories Inc.  
333 Pflingsten Road  
Northbrook, Illinois 60062 U.S.A.
- **Flammable and Combustible Liquids Code: ANSI/NFPA 30.**  
**ADDRESS:**  
American National Standards Institute, Inc.  
1430 Broadway  
New York, New York 10018 U.S.A.  
OR  
National Fire Prevention Association  
Batterymarch Park  
Quincy, Massachusetts 02269 U.S.A.

## OPERATION CONTROL SYMBOLS And DECALS



### Motor Vehicle Compliance

This decal lets the operator know that the vehicle is not defined as a motor vehicle and therefore should not be driven on streets, roads or highways



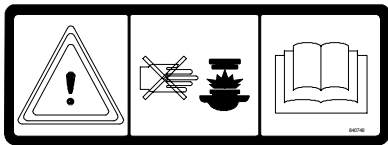
### P.T.O. Warning

This decal warns the operator that an uncovered P.T.O. can cause entanglement of clothing and/or body parts.



### Engine Oil Pressure Light

This light will come on when the ignition key is turned to the ON position and when the engine is started (it will shut off once the engine is running). **Its main function is to warn the operator if the oil pressure gets to low. If this light comes on during normal vehicle operation, stop the vehicle and check for problems**



### Radiator Coolant Warning

This decal warns the operator not to remove the radiator cap when the engine is hot. Refer to the Cooling System Section in this manual for proper safety and operating instructions.



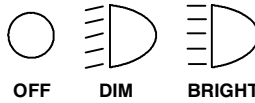
### Park Brake Indicator Light

This light will come on when the park brake is applied.



### Battery (Voltmeter) Charging

This symbol appears on the voltmeter gauge. This gauge indicates the charging of the battery.



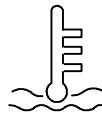
### Headlight Switch Positions

These symbols appear on the light switch. As indicated, each one represents the headlights functions.



### Fuel Level Indicator

This symbol appears on the fuel gauge. The fuel gauge indicates the amount of fuel in the fuel tank



### Water Temperature Gauge

This symbol appears on the water temperature gauge. This gauge warns the operator if the coolant system is overheating.



### Engine RPM

This symbol indicates engine rpm's.



### Electric Cooling Fan Warning

This decal warns the operator keep hands away from the cooling fan, the cooling fan can start at any time even with the ignition key in the OFF position.



### Park Brake Warning

This decal warns the operator that the park brake **is not** automatically applied.



This symbol indicates diesel fuel only



### Read the Operator's Manual

This decal informs the operator to read and understand the Operator's manual. To prevent injury, they must be familiar with the operation of this product and be fully aware of **safe** operating procedures.

 <b>WARNING</b>	<ol style="list-style-type: none"> <li>1. READ AND UNDERSTAND ALL LABELS AND THE OPERATOR'S MANUAL.</li> <li>2. DO NOT ALLOW UNTRAINED PERSONNEL TO OPERATE THIS VEHICLE.</li> <li>3. DO NOT MODIFY THIS VEHICLE WITHOUT MANUFACTURER'S AUTHORIZATION.</li> <li>4. PLACE LOADS FORWARD OF REAR AXLE.</li> <li>5. TOP HEAVY LOADS CAN CAUSE UPSETTING. DO NOT EXCEED PAYLOAD CAPACITY.</li> <li>6. DO NOT OPERATE IF REPAIRS ARE REQUIRED.</li> <li>7. KEEP ALL SHIELDS IN PLACE.</li> </ol>	<ol style="list-style-type: none"> <li>8. SHIFT INTO NEUTRAL OR PARK BEFORE STARTING ENGINE.</li> <li>9. ONLY CARRY PASSENGERS IN SEATS PROVIDED.</li> <li>10. WHEN PARKING (LEAVING) VEHICLE, FOLLOW ALL INSTRUCTIONS IN OPERATOR'S MANUAL.</li> <li>11. AVOID SUDDEN STARTS, STOPS AND SHARP TURNS ESPECIALLY ON SLOPES, OR WITH HEAVY LOADS</li> <li>12. KEEP ALL LABELS AND INSTRUCTIONAL LITERATURE LEGIBLE AND INTACT.</li> <li>13. KEEP ARMS AND LEGS WITHIN VEHICLE BODY.</li> </ol>
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### Vehicle Operation

This decal informs the operator of proper procedures for safely operating the vehicle. Read this manual completely to become aware of other safety issues and operating procedures which will help you operate this vehicle in a safe and responsible manner.

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# VEHICLE IDENTIFICATION NUMBERS

## VEHICLE IDENTIFICATION NUMBERS

This unit is not a motor vehicle within the definition of the national traffic motor vehicle safety act. It is not designed or manufactured for use on roads, streets or highways. It is not appropriate for such use.

**This unit is not meant to be licensed as a motor vehicle.**

### IMPORTANT!

SPARK ARRESTERS ARE REQUIRED BY CALIFORNIA PUBLIC RESOURCES CODE, SECTIONS 4428-4442, WHEN OPERATING ANY INTERNAL COMBUSTION ENGINE ON HYDRO-CARBON FUELS, ON FOREST-, BRUSH-, OR GRASS-COVERED LANDS.

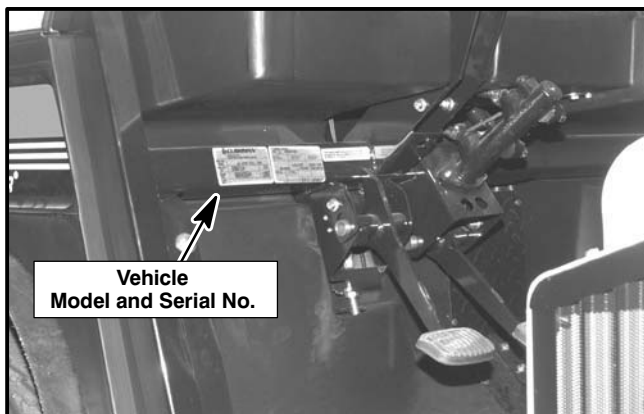
### NOTICE

- Reference to the **front, rear, left** and **right** sides of the vehicle are always determined by the **operator's seated position**.

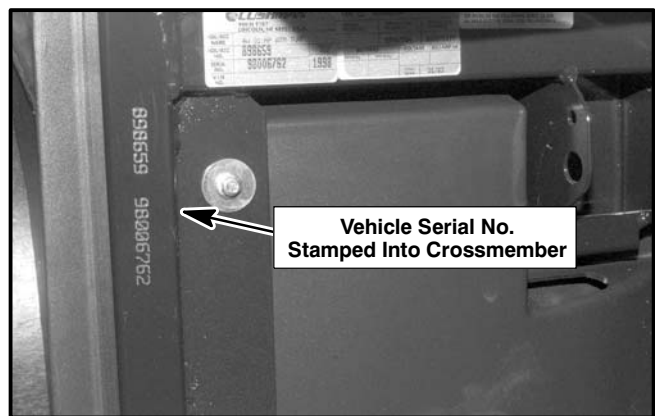
### THE FOLLOWING IDENTIFICATION NUMBERS MUST APPEAR ON ALL CORRESPONDENCE CONCERNING THIS VEHICLE.

The Vehicle Identification Number (VIN), model number and serial number are all printed on the Nameplate/Identification Decal attached to the crossmember under the dash (See Fig. 1).

The serial number and model number are also stamped on the crossmember. It is located to the left of the model and serial no. decals (See Fig. 2).



**Figure 1**  
Nameplate / Identification Decal



**Figure 2**  
Serial Number And Model Number

## ENGINE IDENTIFICATION NUMBERS

Your Cushman Turf-Truckster is equipped with one of three power sources:

A Suzuki K6A 3 cylinder, 4 cycle, liquid-cooled gasoline powered engine;

a Suzuki 970 4-cylinder, 4-cycle, liquid-cooled gasoline powered engine,

or a

Perkins 103-10, 3-cylinder, 4-cycle liquid-cooled diesel powered engine.



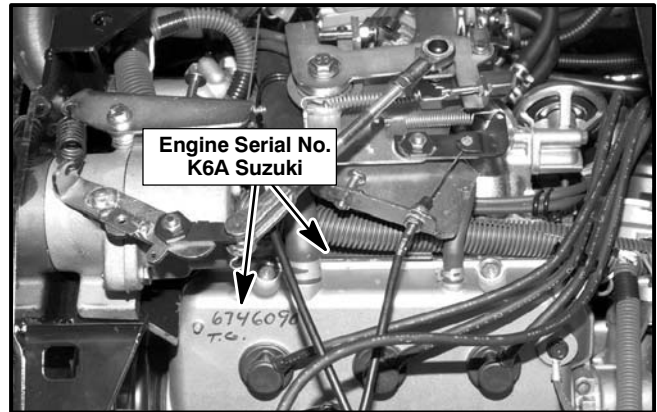
## Engine Identification Numbers (con't.)

Each engine has a serial number stamped onto the engine block. The Perkins diesel's serial no. is stamped on a metal plate which is attached to the engine block.

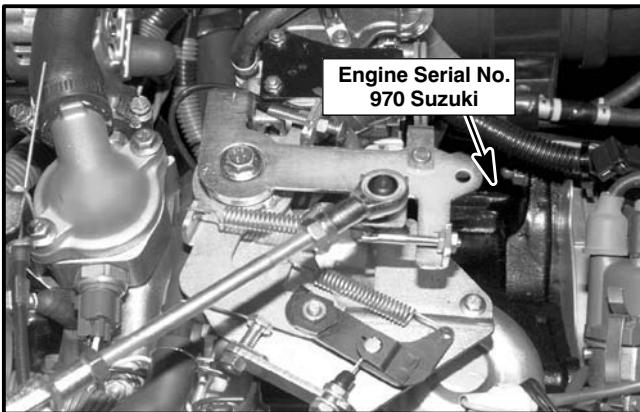
The Engine Serial No. for the Suzuki K6A engine is stamped onto the upper engine block on the left side of the engine.

It's located on top of the engine, beneath the governor bracket and may be partially hidden by the electrical convoluted tubing which passes through that area.

**The engine serial no. is also hand printed on the engine cylinder cover (See Fig. 3).**



**Figure 3**  
**Suzuki K6A Engine Serial Number**



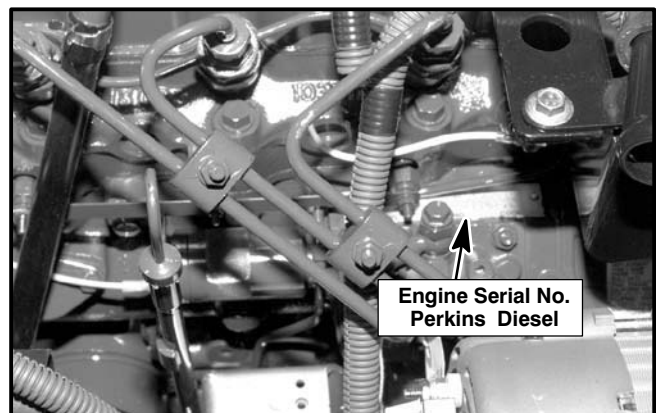
**Figure 4**  
**Suzuki 970 Engine Serial Number**  
**(As Viewed From the Drivers Side of Vehicle)**

The Engine Serial No. for the Suzuki 970 engine is stamped onto the lower engine block on the right side of the engine.

It's located on the lower engine block beneath the air cleaner.

**The 970 engine serial no. is also hand printed on the engine cylinder cover.**

The Engine Serial No. for the Perkins Diesel engine is stamped onto a metal plate on the upper engine block on the left side of the engine.



**Figure 5**  
**Perkins Diesel Engine Serial Number**

# SPECIFICATIONS

## SPECIFICATIONS

Specifications subject to change without notice.

**Rear Axles:** Models 898671, 898673 & 898695 ..... 11.16:1 2-speed hypoid differential

**Transmission:** Models 898671, 898673 & 898695 ..... 4-speed manual with low-low (creeper) 1st gear, synchronized in all forward speeds

All turf models are equipped with a hydraulic brake system and a lever operated parking brake integral to the rear brake drums.

### CAPACITIES

**Fuel Tank** ..... 6.5 gal. (24.5 L)

#### Cooling System:

Suzuki K6A ..... 3.3 qts. (3.0 L)

Suzuki 970 ..... 3.3 qts. (3.0 L)

Perkins Diesel ..... 5 qts. (4.7 L)

#### Crankcase (including filter):

Suzuki K6A ..... 3.3 qt. (3.0 L)

Suzuki 970 ..... 3.7 qt. (3.5 L)

Perkins Diesel ..... 3.7qt. (3.5 L)

**Transmission** (K6A manual) ..... 1.05 qt. (1.0 L);  
(970 & diesel manual) .. 1.4 qt. (1.3 L)  
(automatic) ..... 3.7 qt. (3.5 L)

**Differential** . (11.16:1) ..... 5.2 Pints (2.5 L)

#### Hydraulic System

Standard hydraulics ..... 4 gal. (15.0 L)

Hi-Lo hydraulic accessory ..... 7.6 gal. (28.8 L)

### TIRES

**Front** ..... 20 x 10.00-10 Multi-Rib

**Rear** ..... 24 x 13.00-12 Titan Ultra Trac

### BRAKE FLUID

**Use type** ..... Dot 3

### SUSPENSION

**Front** ..... Double A-arm independent with two spring-over-shock absorbers

**Rear** ..... Heavy-duty multiple leaf springs with shock absorbers

### FUEL

**Gasoline Engines** ..... Unleaded gasoline  
87 Octane or higher

**Diesel Engines** ..... No. 2-D (ASTM D975)  
(see the Fuel Recommendation Section, Page 20)

### LUBRICATION RECOMMENDATIONS

#### Transmission Fluid

(4-speed manual) .... SAE EP 80-90 Gear Lube  
(automatic) ..... Mercon/Dexron II

**Hydraulic System** ..... Hyd Benz Bio 377

**Differential Oil** ..... SAE EP 80-90 Gear Lube

**Pressure Gun Grease** ..... Lithium Base

**Power Steering** ..... Power Steering Fluid (GM)

### BATTERY

Volts ..... 12

BCI Group ..... Size 24

Cold Cranking Amps (minimum) ..... 420

Reserve Capacity Minutes (minimum) ..... 70

Ground Terminal Polarity ..... Negative

### STEERING

14.1 ratio Saginaw power steering and a 14 inch (355.6 mm) steering wheel

**ENGINE SPECIFICATIONS**

**NOTICE**

- The engine governor controls are preset to control engine and ground speeds to design limits.



**WARNING**

- To prevent premature engine failure and speeds greater than design limits, **NEVER** alter the governor controls in any manner to increase engine speed beyond recommended maximum R.P.M.

**Sound Level (Perkins Diesel):**

Pressure Level (right ear) ..... dB(A) 79.2 LpA  
 Pressure Level (left ear) ..... dB(A) 79.2 LpA  
 Sound power level ..... dB(A) 95 LWA

**Vibration Level (Perkins Diesel):**

Whole Body (seat/buttocks) ..... .0248 m/s<sup>2</sup>  
 Whole Body (seat/back) ..... .0257 m/s<sup>2</sup>  
 Whole Body (floor/foot) ..... .0671 m/s<sup>2</sup>  
 Hand/arm (steering wheel/hand) ..... .486 m/s<sup>2</sup>

**Suzuki 970 Engine**

Horsepower (SAE hp) ..... 34  
 Max. Engine Speed ..... 3600 RPM  
 Stroke ..... 2.83" (72 mm)  
 Bore ..... 2.58" (65.5 mm)  
 Displacement ..... 59.2 cu in. (970 cm<sup>3</sup>)  
 Compression Ratio ..... 8.8:1  
 Cylinder Compression ..... 178 PSI (1,228 kPa)  
 Engine Rotation  
 (viewed from flywheel) ..... Counterclockwise  
 Valve Clearance (intake) .0031" cold (0.08 mm)  
 (intake) .0047" hot (0.12 mm)  
 (exhaust) .0039" cold (0.10 mm)  
 (exhaust) .0047" hot (0.12 mm)  
 Spark Plug Gap ..... .032-.035 (0.8-0.9 mm)  
 Spark Plug Number ..... NGK BP5ES  
**OR** Denso W16EX-U  
 Spark Plug Torque .. 18.5-21.5 lb. ft. (25-30 N·m)  
 Breaker Point Gap ..... .008-.015 (0.2-0.4 mm)  
 Ignition Timing ..... 4-5° BTDC @ 950 RPM  
 Idle Speed ..... 950 ± 50 RPM

**Suzuki K6A Engine**

Horsepower (SAE hp) ..... 31  
 Max. Engine Speed ..... 4450 RPM  
 Stroke ..... 2.60" (66mm)  
 Bore ..... 2.56" (65mm)  
 Displacement ..... 40.1 cu in. (657 cm<sup>3</sup>)  
 Compression Ratio ..... 10.5:1  
 Cylinder Compression ..... 178 PSI (1,228 kPa)  
 Engine Rotation  
 (viewed from flywheel) ..... Counterclockwise  
 Valve Clearance (intake) .0031" cold (0.08 mm)  
 (intake) .0047" hot (0.12 mm)  
 (exhaust) .0039" cold (0.10 mm)  
 (exhaust) .0047" hot (0.12 mm)  
 Spark Plug Gap ..... .032-.035 (0.8-0.9 mm)  
 Spark Plug Number ..... NGK DCPR7E  
**OR** Denso XU22EPR-U  
 Spark Plug Torque .. 18.5-21.5 lb. ft. (25-30 N·m)  
 Ignition Timing ..... 4-5° BTDC @ 950 RPM  
 Idle Speed ..... 950 ± 50 RPM

**Perkins Model 103.10 - Spec KD70377**

Horsepower (SAE hp) ..... 22.3  
 Max. Engine Speed ..... 3000 RPM  
 Stroke ..... 2.83" (72 mm)  
 Bore ..... 2.9" (75 mm)  
 Displacement ..... 58.2 cu in. (954 cm<sup>3</sup>)  
 Compression Ratio ..... 23:1  
 Cylinder Compression ..... 425 PSI (2,932 kPa)  
 Engine Rotation  
 (viewed from flywheel) ..... Counterclockwise  
 Valve Clearance (intake) .008" cold (0.2 mm)  
 (intake) .010" hot (.25 mm)  
 (exhaust) .008" cold (0.2 mm)  
 (exhaust) .012" hot (.30 mm)  
 Spark Plug Gap ..... NA  
 Spark Plug Number ..... NA  
 Spark Plug Torque ..... NA  
 Breaker Point Gap ..... NA  
 Injection Timing ..... 22° BTDC @ 1,000 RPM's  
 Idle Speed ..... 950 ± 50 RPM

# CONTROLS

## GAUGES, WARNING LIGHTS and CONTROLS

The following pages contain information which will help you become more familiar with the different gauges and controls used while operating this vehicle.

### TACHOMETER (1)

Indicates the engine speed (x 100) in revolutions per minute (See Fig. 6).

### HOUR METER (2)

The hour meter (See Fig. 6) records the number of hours the engine has run. The hour meter runs when the key switch is **"ON"** *even if the engine is not running*.

### FUEL GAUGE (3)

The fuel gauge (See Fig. 6) indicates the amount of fuel remaining in the fuel tank.

### OIL PRESSURE WARNING LIGHT (4)

The **red** oil pressure light (See Fig. 6) indicates oil pressure is too low for engine operation.

### VOLTMETER (5)

The voltmeter (See Fig. 6) indicates the voltage level of the battery. Under normal operation it will indicate 12 to 18 volts (meaning the battery is being properly charged). A reading below 12 volts indicates the battery is being drained, this may **indicate a malfunction in the charging system which should be checked immediately**.

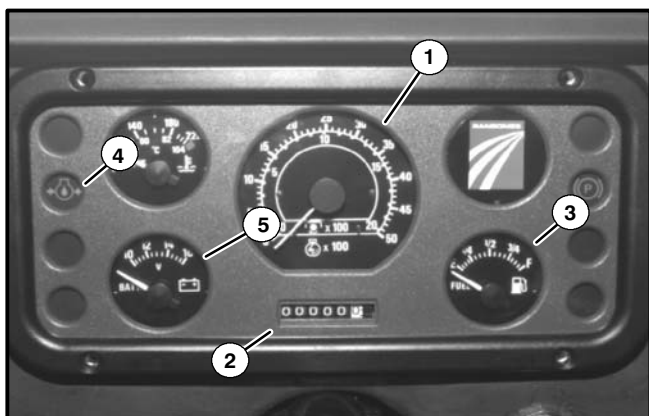


Figure 6  
Dash Panel Identification

### GLOW PLUG INDICATOR (8) (DIESEL ONLY)

The glow plugs must be preheated before the engine can be started. The glow plug indicator is wired in the glow plug circuit and indicates when the glow plugs are being heated and when the engine is ready to start (See Fig. 7).

### BRAKE FLUID LEVEL WARNING LIGHT (6)

This light (See Fig. 7) indicates the brake fluid level is low.

### WATER TEMPERATURE GAUGE, AND OVERHEAT WARNING BUZZER (7)

The purpose of this system is to warn the operator if the engine temperature exceeds the normal operating range.

If the water temperature gauge (See Fig. 7) raises above the 230° F (110°C mark), a heat sensor is activated causing the overheat warning buzzer to sound.

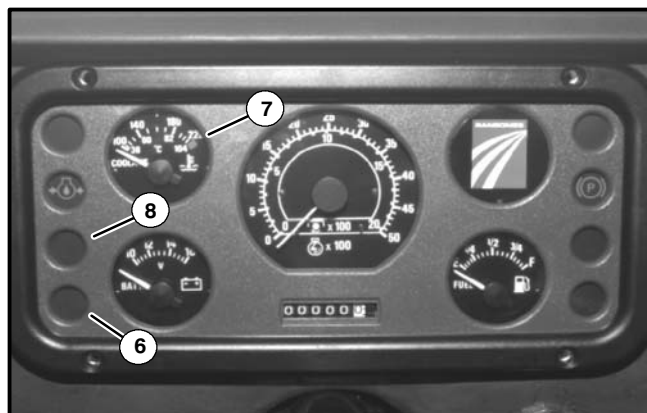


Figure 7  
Dash Panel Identification

### ACCESSORY POWER PLUG

A power port is available for plugging in laptop computers, cellular phones and other accessory items which require a 12-volt plug-in (See Fig. 8).

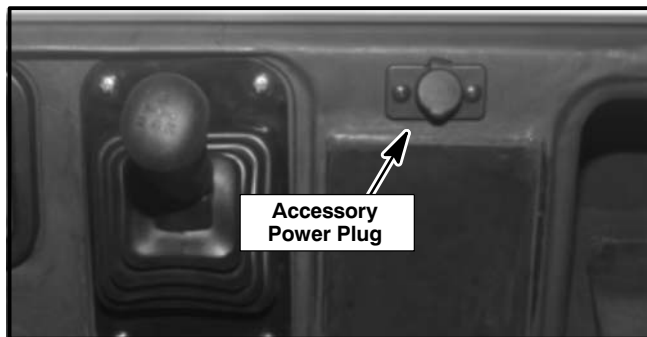
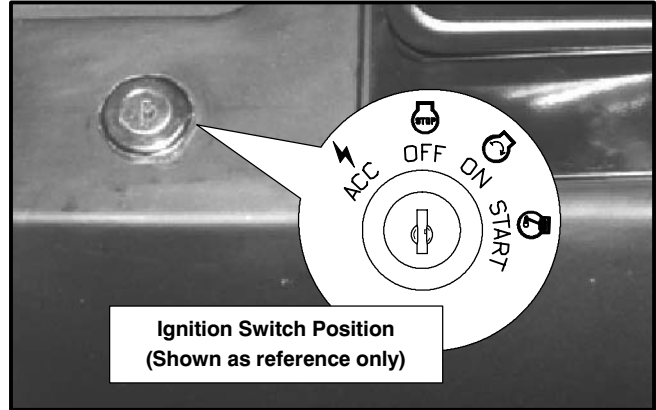


Figure 8  
Accessory Power Plug

**IGNITION SWITCH**

1. **ACCESSORY POSITION** - Allows use of various instruments and accessories without causing ignition system damage.
2. **OFF POSITION** - Prevents function of all vehicle electrical power operated features except for the flasher (hazard) lights, and the radiator cooling fan. **Switch must be in OFF position for key removal.**
3. **ON POSITION** - Key is placed in this position for normal engine operation.
4. **START POSITION** - Hold key in start position to engage engine starter. Upon release, key will return to ON position automatically. **Key must be returned to the OFF position before the starter can be reactivated.**



Ignition Switch Position  
(Shown as reference only)

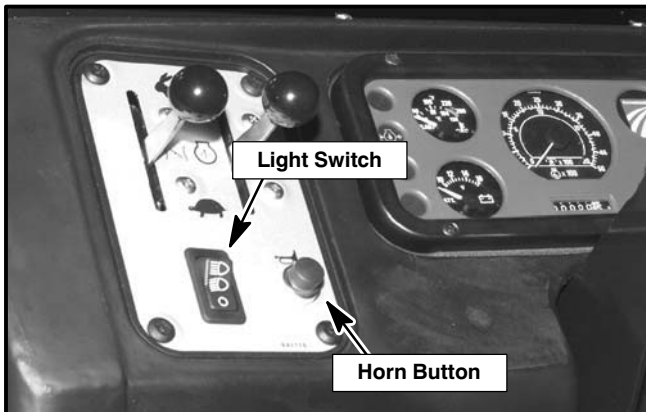
**Figure 9  
Four Position Ignition Switch**

**NOTICE**

- **DO NOT** turn key to START position with vehicle engine running. Damage to flywheel teeth may result.

 **DANGER**

- **Never** turn the key to the **START** position unless the clutch pedal is depressed (pushed down) or the gear selector is in neutral. If the vehicle is *in any gear other than neutral*, and the clutch pedal *is not* depressed when the engine is started, the vehicle may *lurch* forward or backward depending which gear the vehicle is in. This lurching could cause serious personal injury or death.
- If the engine *will* start *without depressing* the clutch pedal the clutch interlock system should be repaired *immediately* by your authorized Cushman dealer.



**Figure 10  
Horn Button and Light Switch Location**

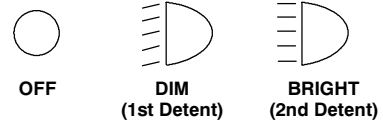
**HORN BUTTON**

The horn button is located to the left of the steering wheel, below the dash panel. Depress to sound horn. Horn will not sound when the ignition switch is in the **OFF** position.

**LIGHT SWITCH**

The light switch is used to turn the headlights and tail-lights on. The switch has three detents, OFF, DIM, and BRIGHT. Push switch up one detent for DIM or push switch up two detents for BRIGHT.

**HEADLIGHT OPERATION SYMBOLS**



## CONTROLS Cont.

### CHOKE (Suzuki 970 engines Only)

The choke is used to assist the starting of a cold engine. Pull **up** on the choke knob **and hold** in the full or partially open position. When the engine has warmed up and is running smoothly release the choke knob (the choke knob is spring loaded in the open position, it will return to its normal position when released) (See Fig. 11).

### PARKING BRAKE LEVER

- Parking brakes are not automatically applied. Make sure and set the park brake when leaving the vehicle.

The park brake lever is located to the left side of the drivers seat. To engage the brake, pull up on the lever until park brake is applied.

To release, while slightly pulling up on the handle, push the button at the end of the lever and while holding the button in, lower the lever to its original position (See Fig. 11).

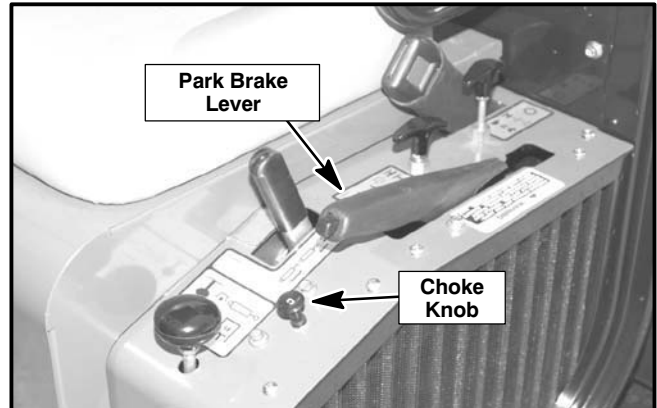


Figure 11  
Park Brake Lever and Choke Knob

## FOOT CONTROL PEDALS

### CLUTCH PEDAL (Manual Transmission Only)

The clutch pedal has to be **depressed before** shifting into any of the gears. The clutch has a **Safety Feature** called a “**clutch interlock switch**”. This switch prevents the starter from operating unless the clutch is disengaged (the clutch pedal is depressed).

If the engine **will** start **without depressing** the clutch pedal:

- **DO NOT** operate the vehicle. The clutch interlock system should be repaired **immediately** by your authorized Cushman dealer.

The clutch pedal has to be **depressed**:

- before starting the vehicle
- before shifting into any of the gears and
- before coming to a complete stop

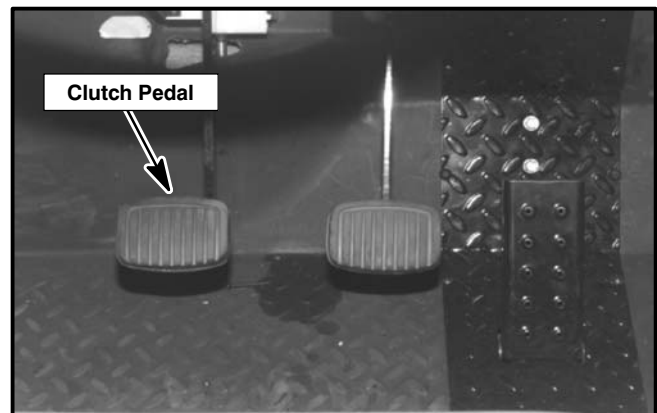


Figure 12  
Clutch Pedal Location



### DANGER

- **Never** start the engine unless the clutch pedal is depressed (pushed down). If the vehicle is **in any gear other than neutral**, with the clutch pedal **not** depressed and the engine is started, the vehicle will **lurch** forward or backward depending which gear the vehicle is in. This lurching could cause serious personal injury or death.

**FOOT THROTTLE (ACCELERATOR) PEDAL**

Push pedal down to open throttle (*increase speed*), release to return throttle to idle position (*decrease speed*).

**SERVICE BRAKE PEDAL**

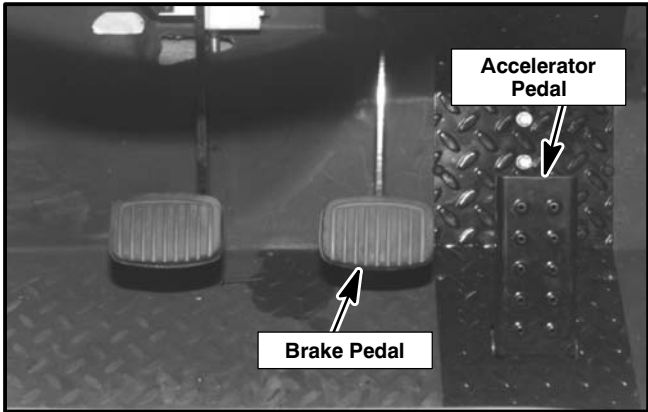
Depress the pedal to slow or stop the vehicle.

If the brakes **DO NOT** stop the vehicle properly, the brakes must be adjusted or repaired.



**CAUTION**

- **Improper maintenance of brake system can result in the operator losing control of vehicle.**
- **Loads not properly secured can quickly shift causing personal injury or vehicle damage if the brakes are applied too hard and fast.**



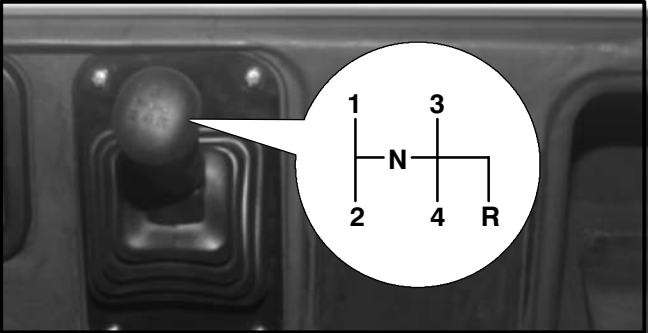
**Figure 13**  
**Foot Control Pedals**

**GEAR SELECTOR**

**Manual Transmission**

The gear selector has an “H” pattern as shown in Figure 14. There is also a shift-pattern design molded into the top of the gear selector handle.

Remember, **before** shifting to **any** gear you have to **depress** the clutch pedal **before** you shift to that particular gear.



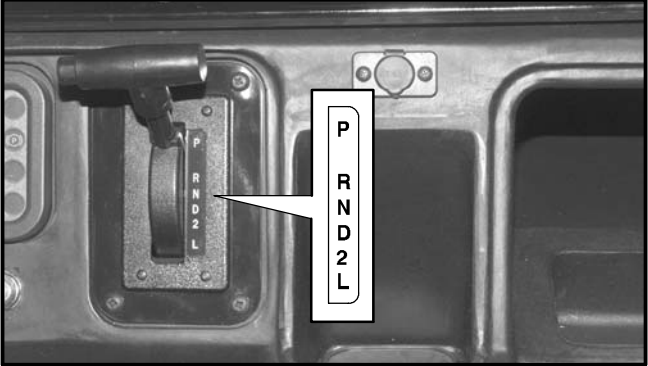
**Figure 14**  
**Shift Pattern (Manual Transmission)**

**Automatic Transmission**

The gear selector has the gear selections listed on the left side of the shifter handle. **Some units may have the gear selections on the right side** as shown in Fig. 15.

Push in the selector lever button when shifting in or out of “P” Park, into “N” Neutral or when down shifting to “2” Second or “L” Low from “D” Drive.

It is not necessary to use the button when shifting up from **Low, Second** or **Drive** to **Neutral**, from **Reverse (R)** to **Neutral** or from **Neutral** to **Drive**.



**Figure 15**  
**Automatic Transmission Gear Selector**

## SERVICE and MAINTENANCE

*Think Ahead! Work Safely!*



### WARNING

- When replacement parts are required, use genuine Cushman parts or parts with equivalent characteristics including type, strength and material. Failure to do so may result in product malfunction and possible injury to the operator and/or bystanders.
- Never attempt to perform service or maintenance functions on this vehicle if you are UNTRAINED or UNAUTHORIZED. Improper maintenance can cause hazardous conditions. See your authorized CUSHMAN dealer for necessary maintenance and service.
- Always replace any warning decal that becomes hard to read.
- To reduce risk of fire, always keep the engine free of excessive grease.

### ENGINE MAINTENANCE

Keep your engine clean.

If dirt has accumulated on the engine, it should be washed with a non-flammable solvent or strong detergent.

When washing becomes necessary, it can be carried out simultaneously when servicing the vehicle.

In order to maintain reliable service from your engine, a regular check-up and maintenance schedule should be followed.

The following maintenance information covers basic engine service only.

For extensive service and repairs, we recommend contacting the authorized Cushman dealer nearest you.

Proper maintenance will prolong the engine's life and avoid premature overhaul.

### ENGINE BREAK IN

The service life of your engine is dependent upon how your engine is operated during the first 50 hours of operation.

**ALWAYS:** • Use care not to overload your engine

- Maintain engine oil level
- Maintain cooling system



### WARNING

- To prevent premature engine failure and speeds greater than design limits, **NEVER** alter the governor controls in any manner to increase engine speed beyond recommended maximum R.P.M.

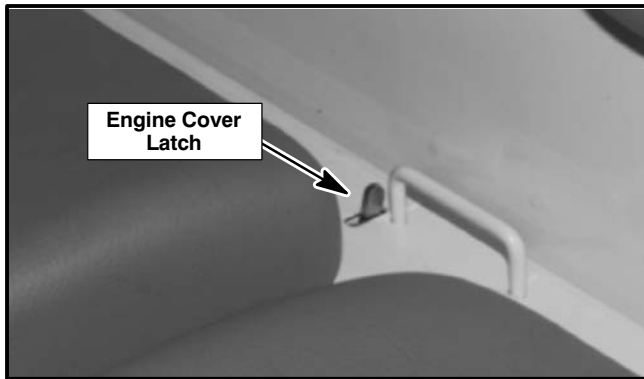
### ACCESS TO ENGINE

**Never** remove or install the engine cover while the engine is running. The engine cover is a ***machinery guard*** and its removal exposes you to moving parts. Keep hands, hair and clothing away from flywheel, radiator cooling fan, alternator fan, engine belts, pulleys and air intake.

For servicing the engine and related components, the engine cover can be tilted forward or removed.

To gain access to the engine, push the engine cover latch to the rear of the unit, tilt cover forward. The latch is located at the center rear on top of the engine cover (between the seat cushion(s) and backwall).

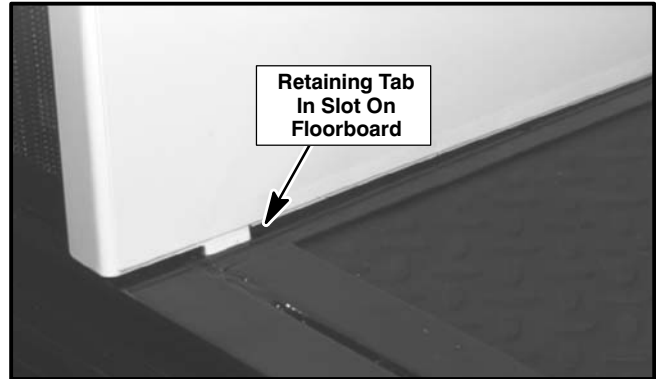


**Access to Engine (con't.)**

**Figure 16**  
**Engine Cover Latch**

To gain access to the engine on a **CE compliant model**, insert the key into the locking handle located at the side of the engine cover latch, turn the key to allow the latch to be pushed back (the locking handle can also be used as an accessory on any of the other turf vehicles).

When replacing the engine cover, make sure the retaining tabs, located at the front corners of the engine cover, are inserted into the slots in the floorboard.



**Figure 17**  
**Engine Cover Retaining Tab**

**WARNING**

- Failure to latch the seat properly can result in the engine cover tipping forward causing loss of control of the vehicle and possible personal injury.

**PRE-STARTING CHECKLIST**

Before starting your engine for the first time; after a prolonged shutdown; and before each days use, check the following:

1. Check the engine oil level.
2. Check the radiator coolant level and radiator intake screen.
3. Check the fuel level.
4. Check tire pressure.
5. Check brake fluid level.

If the diesel engine is being started for the first time or is being started after a prolonged shutdown it will be necessary to purge the fuel system (see Purging the Fuel System, Page 22).

**ENGINE OIL LEVEL**

**Always** turn the engine **off** when checking the oil level. **Oil level should be checked daily.**

**NOTICE**

- Make sure vehicle is on level surface and the park brake is applied.

# SERVICE & MAINTENANCE Cont.

## Engine Oil Level (con't.)

Remove the dipstick and wipe with a clean rag, reinsert the dipstick until it contacts the oil tube, remove dipstick and read the oil level.

The oil level should always be between the **ADD** and **FULL** mark on the dipstick. **DO NOT OVER FILL.**

**If the engine has recently been running, allow time (with the engine turned off) to let the oil settle to obtain a correct level reading.**

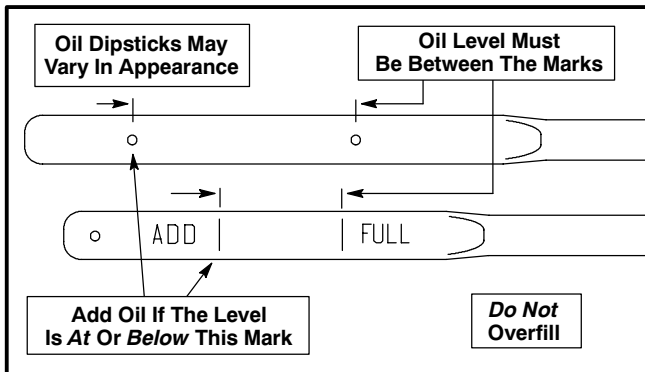
If the oil level is below the add mark, add an **SAE 10W-30** oil to bring the level up between the marks (refer to the recommended oil weights in the chart for your particular climate range).

Remove the oil fill cap and add the appropriate amount of engine oil. Use the dip stick to check the level again, if oil level is sufficient, replace oil fill cap.

**DO NOT OVERFILL**

## Engine Oil Capacity

- Suzuki K6A** ..... 3.3 qts. (3.0 L)
- Suzuki 970** ..... 3.7 qts. (3.5 L)
- Perkins Diesel** ..... 3.7 qts. (3.5 L)



**Figure 18**  
Oil Level Reading

<b>Perkins Diesel</b>										
SAE 10W/10W-30			SAE 20W/10W-30				SAE 30W/10W-30			
<b>Suzuki K6A &amp; 970</b>										
SAE 10W-30 for all temperature ranges										10W-40
°F	-20	0	20	32	40	60	77	80	100	
°C	-30	-20	-10	0	10	20	25	30	40	
Temperature Range Anticipated Before Next Oil Change Using multi grade oils (5W-20, 10W-30, and 10W-40) will increase oil consumption. Check oil level more frequently when using them.										

## NOTICE

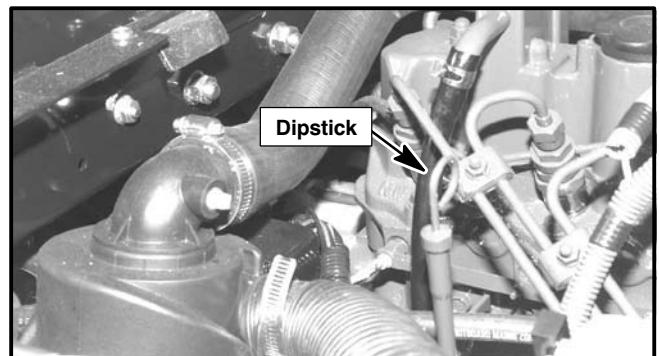
- If you notice the **oil pressure warning light** coming on, **STOP** the vehicle and check for problems.



**Figure 19**  
Oil Pressure Warning Light

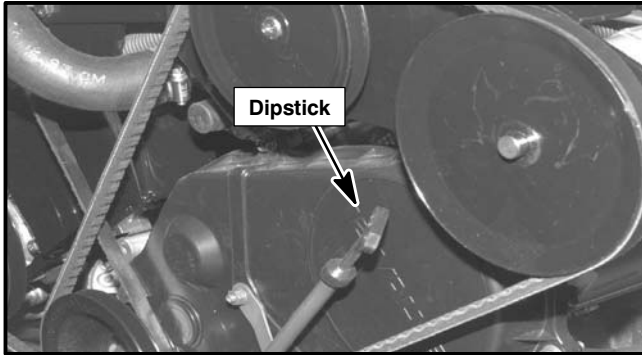
## Engine Oil Replacement Filters:

- Suzuki K6A** ..... Order Part No. 16510-82703
- Suzuki 970** ..... Order Part No. 16510-82703
- Perkins Diesel** ..... Order Part No. 842553

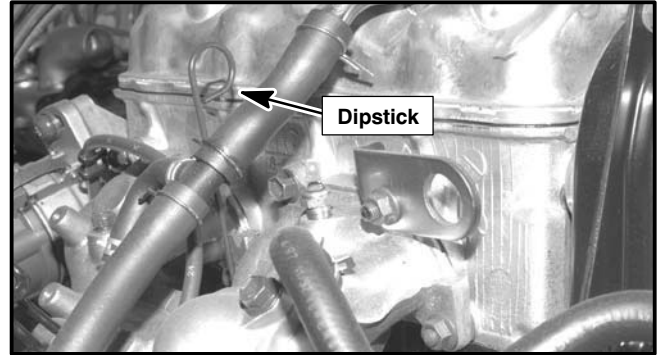


**Figure 20**  
Dipstick Location, Perkins Diesel Engine

## Engine Oil Level (con't.)



**Figure 21**  
Dipstick Location, K6A Suzuki Engine



**Figure 22**  
Dipstick Location, 970cc Suzuki Engine

## WATER TEMPERATURE GAUGE AND OVERHEAT WARNING BUZZER

The purpose of this system is to warn the operator if the engine temperature exceeds the normal operating range. If the water temperature gauge raises above the 230° F (110° C) mark, a heat sensor is activated causing the overheat warning buzzer to sound.

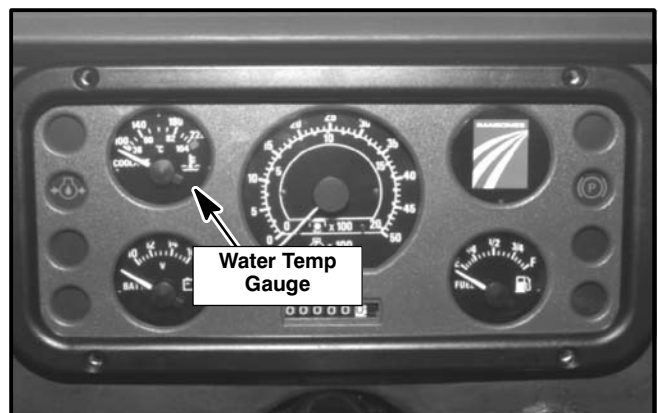


### CAUTION

- Be careful when opening the engine cover, when raising the seat and when cleaning the chaff from around the intake screen. Parts that are metal may be *hot* to the touch.
- The vehicle seat is a machinery guard. To avoid injury, use extreme caution and **DO NOT** place hands or clothing near moving parts (belts, fan, etc.).

During operation (driving), if the water temperature gauge shows **230° F (110° C) or over**, and/or the overheat warning buzzer sounds, follow this procedure:

1. **STOP** the vehicle, **DO NOT STOP THE ENGINE**.
2. **Immediately** disengage any accessories that are operating.
3. Slow the engine to a "fast idle".
4. Remove any dirt, chaff, debris, etc. from the radiator intake screen located on the right side of the engine cover (the intake screen and surrounding area will be hot, use caution when removing debris from this area).
  - Failure to:
    - (1) heed the overheat warning and
    - (2) maintain cooling system, will cause permanent damage.



**Figure 23**  
Water Temperature Gauge

## SERVICE & MAINTENANCE Cont.

### Water Temperature Gauge and Overheat Warning Buzzer (con't.)

The temperature indicator on the gauge should go down within approximately 30 seconds after the intake screen is cleaned. If the temperature **does not go down**, **STOP THE ENGINE** and check the following areas:



#### WARNING

- **ALWAYS** make sure the engine is stopped and cool before removing the radiator cap or before performing any service or maintenance on or around the engine area. To prevent scalding by hot water, **NEVER** remove the radiator cap while radiator is hot.
- The cooling system is under pressure, if a leak is present, be careful when raising the seat or when opening the engine cover. **Hot** coolant can be sprayed causing personal injury.

1. Raise vehicle seat and visually check to see if electric radiator fan is operating and check to determine if there may be a leak in the cooling system (allow ample time for the engine and surrounding area to cool before attempting to perform any service or maintenance).
2. Check the radiator fins and screen. If they are dirty, they **must** be cleaned. **Engines damaged due to overheating caused by plugged radiators WILL NOT be warranted.**
3. Check oil engine level.
4. Check radiator and coolant reservoir levels.

Also refer to page 37 for Dash Panel Bulb Replacement.

### RADIATOR COOLANT LEVEL

The vehicle is equipped with a cooling radiator and an electric cooling fan.



#### WARNING

- The cooling fan is thermostatically controlled and **may start at any time, even with the ignition key in the OFF position, DO NOT** attempt service without first disconnecting the negative (-) battery cable or without first removing the fan fuse.
- The cooling system is under pressure, if a leak is present, be careful when raising the seat or when opening the engine cover. **Hot** coolant can be sprayed causing personal injury.

To provide proper engine cooling it is important to keep the cooling system properly maintained. Part of maintaining the system involves making sure the intake screen, radiator fins and surrounding engine areas remain free of debris.

- **DO NOT** obstruct or cover the intake screen in front of the radiator. Keep the fins and radiator screens clean.
- If the radiator fins or intake screen become dirty, air cannot circulate well enough to cool the engine sufficiently, therefore you risk the chance of the engine overheating. **Engines damaged due to overheating caused by plugged radiators WILL NOT be warranted.**



Radiator Warning Decal



Fan Warning Decal

## Radiator Coolant Level (con't.)

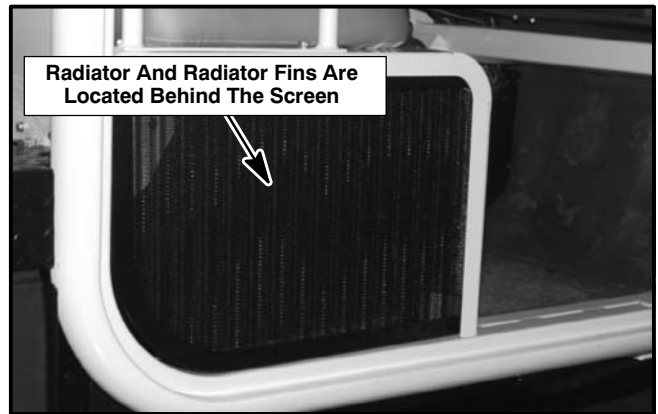
### NOTICE

- Clean the radiator fins with compressed air. If water is used to clean the radiator, use compressed air to blow all the water from the fins. Water left between the fins will collect dirt and plug the radiator, this will reduce the amount of air flow to properly cool the engine. **Engines damaged due to overheating caused by plugged radiators WILL NOT be warranted.**

The cooling system level and the intake screen should be checked every day before vehicle operation.

Along with the daily pre-start list, you should also:

1. Check the radiator and coolant hoses for leaks and faulty connections, repair as necessary.
2. Inspect the engine belts for fraying or cracking and check the engine for loose hardware.
3. Check the coolant reservoir (there should be approximately four (4) inches (102 mm) of coolant in the reservoir).
4. Remove the radiator cap and check the coolant level, the coolant should be at, or with-in a 1/4" (6 mm) from the bottom of the filler port (if coolant is needed, add a 50/50 anti-freeze/water mixture following the procedures stated below).



**Figure 24**  
**Intake Screen (Right Side of Vehicle)**

## ADDING ANTI-FREEZE TO THE COOLING SYSTEM

The cooling system should be drained and refilled every **400 hours** or **nine (9) months**.

Make a 50/50 mixture of anti-freeze and water in a separate container before adding coolant to the radiator. **Never** add straight anti-freeze to the radiator, the mixture **must never** be more than 50% anti-freeze.

### Cooling System Capacity:

**Suzuki K6A Engine:** . 3.3 qts. (3.0 L)

**Suzuki 970 Engine:** . . 3.3 qts. (3.0 L)

**Perkins Diesel:** . . . . . 5.0 qts. (4.7 L)

Unless the radiator is very low, always add coolant to the overflow reservoir not to the radiator.

With the park brake applied and the gear selector in neutral or park (automatic transmissions), start the engine and let idle.

Remove the overflow reservoir cap, add the anti-freeze mixture to the overflow bottle until the coolant level reaches approximately 4" (102 mm) in the bottle, replace reservoir cap.

If the radiator level is very low, add the anti-freeze mixture directly to the radiator until it reaches approximately 1/4" (6 mm) from the bottom of the filler neck, then start the engine and add mixture to the overflow reservoir until proper level is reached.

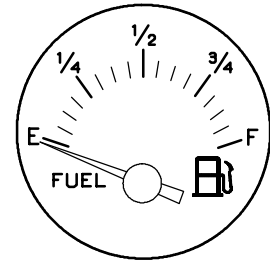


### WARNING

- **ALWAYS** make sure the engine is stopped and cool before removing the radiator cap. To prevent scalding by hot water, **NEVER** remove cap while radiator is hot.

### FUEL LEVEL

1. Check fuel level in fuel tank. Turn the ignition switch to the ON position, fuel level will be determined by how far the fuel gauge needle rises. The illustration below shows the various levels for reading the fuel gauge.
2. Fuel tank capacity is **6.5 gal. (24.5 L)**. Fill if necessary using the following fuel recommendations:
  - **Gasoline Engines** - Unleaded gasoline with an 87 or higher Octane reading.
  - **Diesel Engines** - Diesel Fuel No. 2-D (ASTM D975) **Do Not** use Aviation Fuel JP4



Fuel Tank Volume

The fuel tank is located on the right side of the vehicle in front of the rear tire.

For vehicles using diesel fuel, Use #1 diesel fuel (ASTM No. 1D) when temperature is 20° F (-7° C) or below: use #2 diesel fuel (ASTM No. 2D) when temperature is above 20° F (-7° C).

If No. 1D is not available, a **winterized** blend of No. 1D and No. 2D may be available. This blended fuel is usually called No. 2D and may be used in colder climates.

Never use No. 2D at temperatures below 20° F (-7° C) unless you are sure it has been **winterized**. Cold temperatures may cause it to thicken which will keep your vehicle from running.



#### WARNING

- Remove fuel cap slowly. Fuel may be under pressure. Spray may cause serious injury.
- Engine fuels are extremely flammable and highly explosive under certain conditions.
- **NEVER** remove the fuel tank cap or attempt to refuel the unit while the engine is running.
- **NEVER** refuel indoors. **NEVER** smoke while refueling.
- **ALWAYS** wipe up spilled fuel immediately.
- **NEVER** operate the unit without an approved cap on the fuel tank filler opening.

### GASOLINE CONTAINING ALCOHOL

We **DO NOT** recommend the use of **ALCOHOL** bearing fuels in any of our products. The use of these fuels may create a potential safety hazard.



#### WARNING

- Gasoline containing **ALCOHOL** can cause deterioration of some non-metallic materials in the fuel system.
- Fuel hoses must be inspected frequently and replaced if excessive stiffness, deterioration or fuel leakage is found.
- Gasoline containing **ALCOHOL** will attract and hold moisture inside fuel tanks. Moisture may cause corrosion of metallic parts within the fuel system.
- Fuel leakage from a fuel system can occur while the system is in use, in transit, or in storage. Such leakage can contribute to an explosion or fire, causing serious bodily injury or death.

**TIRE PRESSURE**

1. Check all tires for proper inflation. Keep tires inflated to the specifications corresponding to that particular tire size. Air pressure needed is determined by the payload carried. Adjust pressure as required. Lower pressure will help avoid leaving tire marks in soft turf. Higher pressures may be required for heavy loads. **NEVER** exceed the maximum pressure indicated on the tire.

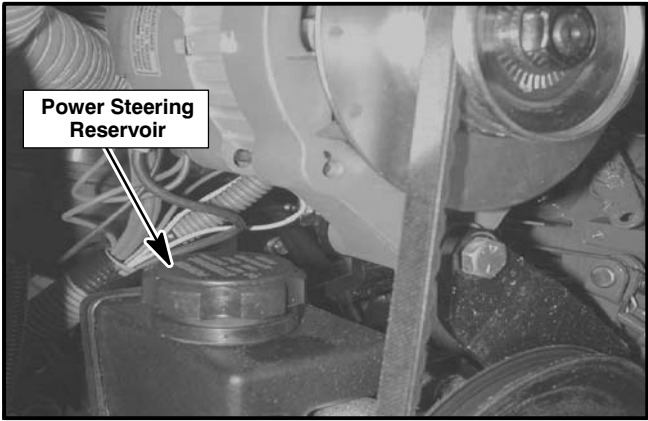
TIRE SIZE	TIRE PRESSURE
20-8.00 X 10 (4 PLY) . . . . .	20 PSI (138 KPA)
20-10.00 X 10 . . . . .	20 PSI (138 KPA)
24-13.00 X 12 . . . . .	15 PSI (110 KPA)

**NOTICE**

- Improper inflation will shorten the life of your tires considerably. Fill tires with care. Use a pressure gauge before connecting an air hose to a partly inflated tire. **Due to the low air volume needed, over-inflation may be reached in a matter of two or three seconds.**


**POWER STEERING**

The power steering reservoir is located on the right side of the engine, below and to the right of the alternator. The level in the reservoir should be **checked after the first 35 hours** and then **again after another 35 hours**, after that the level should be **checked every 100 hours**. Use GM power steering fluid to maintain the correct fluid level.



**Figure 25**  
**Power Steering Reservoir**

Remove the power steering reservoir cap. When checking the fluid level for the first time at the beginning of the day, the fluid level should be at the “cold” mark on the dipstick. When checking the fluid level after the engine has been running and the fluid is warm, the level should read between the “cold” and “hot” marks.

 **WARNING**

- **Before servicing or doing any maintenance work around the engine area, make sure the engine has had time to cool. Serious burns can result if the engine and surrounding area is hot.**

**STARTING THE ENGINE (Gasoline Engines)**  
**Manual Transmission**

1. Make sure the parking brake is applied (the parking brake should have been applied when the vehicle was last parked).
2. Turn the ignition key to the ON position and observe the warning lights and gages (some of the warning lights will remain on until the engine has started and is running).

### Starting the Engine con't.

3. Move the gear selector to "NEUTRAL".
4. Push clutch pedal down (**starter will not operate unless clutch pedal is pushed down**). The clutch interlock switch prevents the starter from operating unless the clutch is disengaged (the clutch pedal is depressed). If the engine **will** start **without depressing** the clutch pedal **DO NOT** operate the vehicle. The clutch interlock system should be repaired **immediately** by your authorized Cushman dealer.



#### DANGER

- **Never** turn the key to the START position unless the clutch pedal is depressed (pushed down) or the gear selector is in neutral. If the vehicle is *in any gear other than neutral*, and the clutch pedal *is not* depressed when the engine is started, the vehicle *may lurch* forward or backward depending which gear the vehicle is in. This lurching could cause serious personal injury or death.

5. Turn and hold ignition key in the START position to engage engine starter, release key when engine starts (upon release, the key will automatically return to the ON position).
  - If the engine does not start after operating starter for 10 seconds, stop the starter. Wait for 30 seconds, then try to start the engine again.
  - The starter motor should never be run for more than 30 seconds.
6. Allow engine to warm-up before driving the vehicle (always idle and warm-up the engine for at least one minute).

## STARTING THE ENGINE (Gasoline Engines)

### Automatic Transmission

1. Apply the park brake (the parking brake should have been applied when the vehicle was last parked).
2. Make sure the gear selector is in Park "P" (engine **will not** start if gear selector is in "R", "D", "2", or "L"). If the engine **will** start when the gear selector is in "R", "D", "2", or "L" **DO NOT** operate the vehicle. The vehicle should be repaired **immediately** by your authorized Cushman dealer.
3. Turn the ignition key to the ON position and observe the warning lights and gages (some of the warning lights will remain on until the engine has started and is running).



#### DANGER

- **Never** turn the key to the START position unless the gear selector is in "Park" or neutral. If the vehicle is *in any gear other than Park or neutral*, and the engine is started, the vehicle *may lurch* forward or backward depending which gear the vehicle is in. This lurching could cause serious personal injury or death.

4. Turn and hold ignition key in the START position to engage engine starter, release key when engine starts (upon release, the key will automatically return to the ON position).
  - If the engine does not start after operating starter for 10 seconds, stop the starter. Wait for 30 seconds, then try to start the engine again.
  - The starter motor should never be run for more than 30 seconds.
5. Allow engine to warm-up before driving the vehicle (always allow at least one minute for the engine to warm-up).



## STARTING THE ENGINE (Diesel Engines)

### Manual Transmission

The diesel engine uses glow plugs to pre-heat the combustion chamber and makes cold engines start easier. When starting a new diesel engine for the **first time**, or **after prolonged storage**, or **if the fuel tank is allowed to run dry**, the fuel system **must be purged** before attempting to start the engine (refer to Purging the Diesel Fuel System, Page 22 of this manual).

When starting the vehicle for the **first time during the day** or **when the engine has cooled**, you will need to pre-heat the glow plugs in order to start the engine.

If the engine has been running and is still hot, **it is not necessary** to pre-heat the glow plugs before starting the engine.

1. Apply the park brake (the parking brake should have been applied when the vehicle was last parked).
2. Move the gear selector to "NEUTRAL".
3. Push clutch pedal down (**starter will not operate unless clutch pedal is pushed down**). The clutch interlock switch prevents the starter from operating unless the clutch is disengaged (the clutch pedal is depressed). If the engine **will start without depressing** the clutch pedal **DO NOT** operate the vehicle. The clutch interlock system should be repaired **immediately** by your authorized Cushman dealer.



### DANGER

- **Never** turn the key to the START position unless the clutch pedal is depressed (pushed down) or the gear selector is in neutral. If the vehicle is **in any gear other than neutral**, and the clutch pedal **is not** depressed when the engine is started, the vehicle **may lurch** forward or backward depending which gear the vehicle is in. This lurching could cause serious personal injury or death.

4. Turn the ignition key to the ON position. Note the pre-heat light at the lower left of the instrument panel.

The light will come on when the ignition switch is turned to the "ON" position. When the pre-heat light goes off, turn the ignition key to the "START" position.

**Proper pre-heating time required is approximately 15 seconds. Pre-heating will take longer (approximately 30 seconds) when outside temperature falls below 32° F (0° C).**

Preheating time should never last more than 2 minutes or the life of the glow plugs will be shortened.

5. Hold ignition key in the START position to engage engine starter, release key when engine starts (upon release, the key will automatically return to the ON position).

- If the engine does not start after operating starter for 10 seconds, stop the starter. Wait for 30 seconds, then try to start the engine again.
- The starter motor should never be run for more than 30 seconds.
- After the engine has started, make sure the oil pressure warning and service brake warning lights go off.



**Figure 26**  
**Pre-Heat Indicator Light (Diesel Models Only)**

### Starting the Diesel Engine con't.

6. Allow engine to warm-up before driving the vehicle (always idle and warm-up the engine for at least one minute)

Check for abnormal noises such as knocking and excessive vibration

Knocking sounds will be heard while the engine is cold, during quick acceleration and while idling.

Knocking sounds **will not** be heard during normal operation.

Confirm the exhaust smoke is seen as follows:

While engine is cold: White smoke

When engine is warm and during normal operation: Almost smokeless

When engine is heavily loaded: Some black smoke

#### NOTICE

- **DO NOT** use ether or starting fluid with diesel engines. Severe engine damage will occur.

Starting under sub-freezing conditions:

- Make sure correct weight engine oil is used.
- Make sure the battery is fully charged.
- Pre-heat glow plugs for the correct length of time.
- Make sure cooling system is tested safe for the ambient temperature.

## PURGING THE DIESEL FUEL SYSTEM

The fuel system **must be purged** when:

- Starting a new diesel engine for the first time
- After prolonged storage
- The fuel tank is allowed to run dry
- The fuel filter and/or fuel lines have been loosened, removed or replaced

**Purge the fuel system using one of the procedures as follows:**

### PURGING FUEL SYSTEM USING A JUMPER WIRE

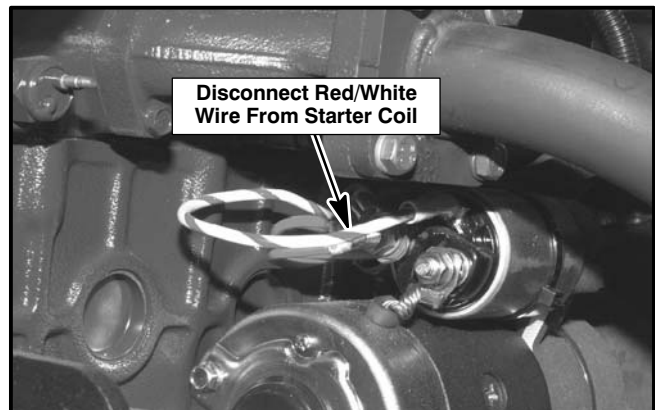
**This method allows the fuel pump to run *continuously* when purging the system.**

1. Turn the ignition key to the **off** position.
2. Disconnect the white/red wire from the starter coil.



#### WARNING

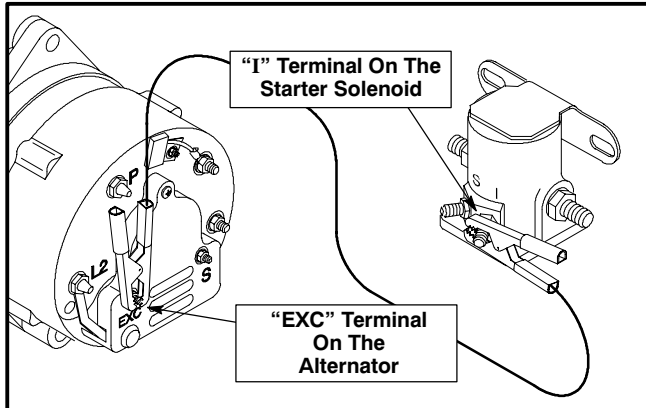
- Failure to remove this wire may result in the starter engaging causing the vehicle to move. This movement could result in personal injury and/or property damage.



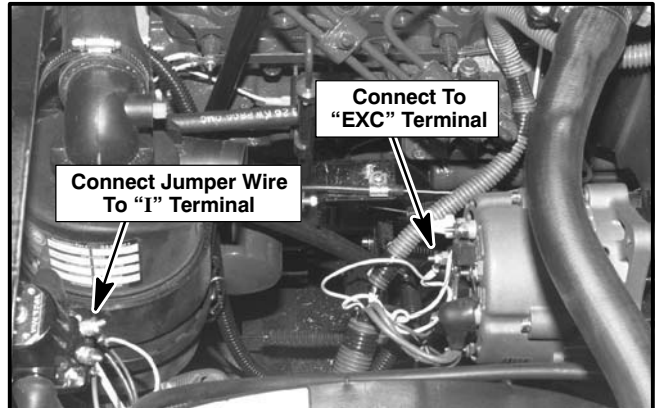
**Figure 27**  
**Purging Diesel Fuel System**

**Purging the Diesel Fuel System (con't.)**

3. Clip one end of a jumper wire to the **EXC** terminal on the back of the alternator as shown in Figures 28 & 29 (this terminal will have a green wire connected to it).
4. Clip the other end of the jumper wire to the "I" terminal on the starter solenoid (See Figs. 28 & 29).



**Figure 28**  
**Connect Jumper Wire to Alternator & Solenoid**

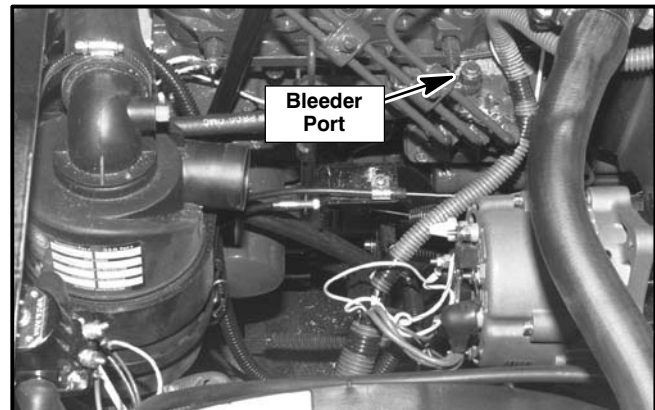


**Figure 29**  
**Terminal Locations**

5. Open the bleeder port located on top of the fuel injector (See Fig. 30).
6. Turn the ignition key to the "ON" position (the fuel pump will begin to pump).

When the fuel pump is pumping fuel only, the "thumping" sound will become more of a "purring" sound, when this occurs tighten the bleeder port.

Turn the ignition key to the "OFF" position, remove the jumper wire and reconnect the white w/red wire onto the starter coil.



**Figure 30**  
**Bleeder Port Location**

**PURGING FUEL SYSTEM WITHOUT THE USE OF A JUMPER WIRE**

**Fuel system bleed may be accomplished using the glow plug timer if no jumper wire is available.**

The fuel pump will energize for approximately 20 seconds during start-up from the glow plug pre-heat timer.

1. Open the bleeder port on top of the fuel injector (See Fig. 30).  
Turn the ignition key to the "ON" position. The fuel pump will be activated for about 20 seconds until the glow plug timer stops.

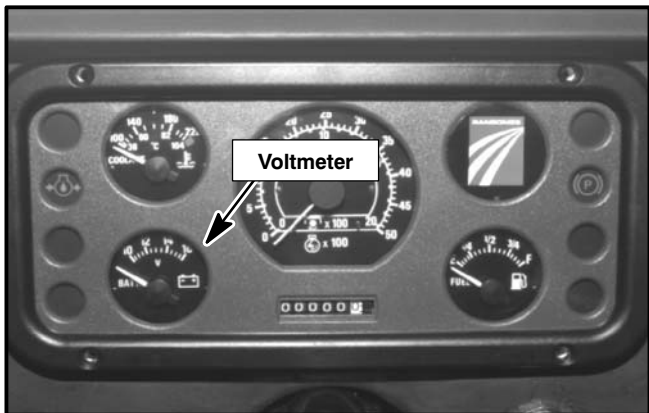
When the timer stops, turn the key to the "Off" position then turn it back to the "ON" position, the fuel pump will run again for approximately 20 seconds, when the glow plug timer stops, turn the key off again. Continue with this procedure until the system is purged. When the fuel pump is pumping fuel only, the "thumping" sound will be more of a "purring" sound, when this occurs, tighten the bleeder port.

# SERVICE & MAINTENANCE

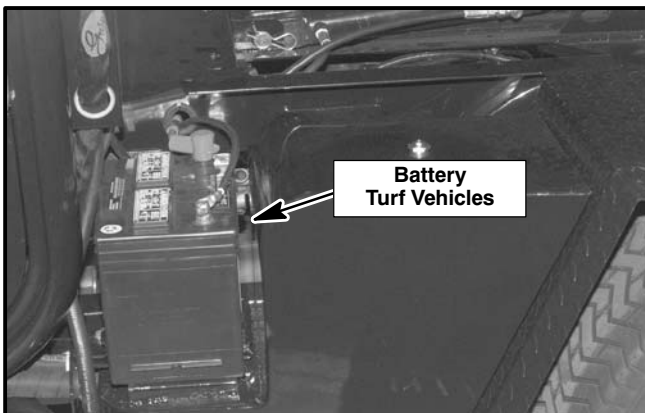
## BATTERY

The battery is located on the left side of the vehicle, directly behind the stopwall behind the drivers seat.

The battery is negative ground and if connected in the opposite polarity, damage to the alternator will occur. The same applies when connecting a booster battery to the system.



**Figure 31**  
**Voltmeter (Battery Charging System)**



**Figure 32**  
**Battery Location For Turf Vehicles**

**The battery in this vehicle is “low maintenance”. Add distilled water as required.**

The voltmeter indicates the voltage level of the battery. Under normal operation it will indicate 12 to 18 volts (meaning the battery is being properly charged). A reading below 12 volts indicates the battery is being drained, this may **indicate a malfunction in the charging system which should be checked immediately.**

### NOTICE

- Keep top of battery clean and free of corrosion by washing with a solution of baking soda and water or ammonia and water. Rinse with clean water. Terminals with heavy corrosion should be removed and cleaned with solution. For best results clean both battery post and cable terminals until shiny. Replace terminals and tighten.



### WARNING

- Untrained/Unauthorized persons should **NEVER** attempt to service or recharge the battery in this vehicle.
- Battery electrolyte is an acidic solution and should be handled with care. If electrolyte is spilled or splashed on any part of the body, immediately flush the exposed area with liberal amounts of water and obtain medical aid immediately.

## JUMP STARTING WITH A BOOSTER BATTERY



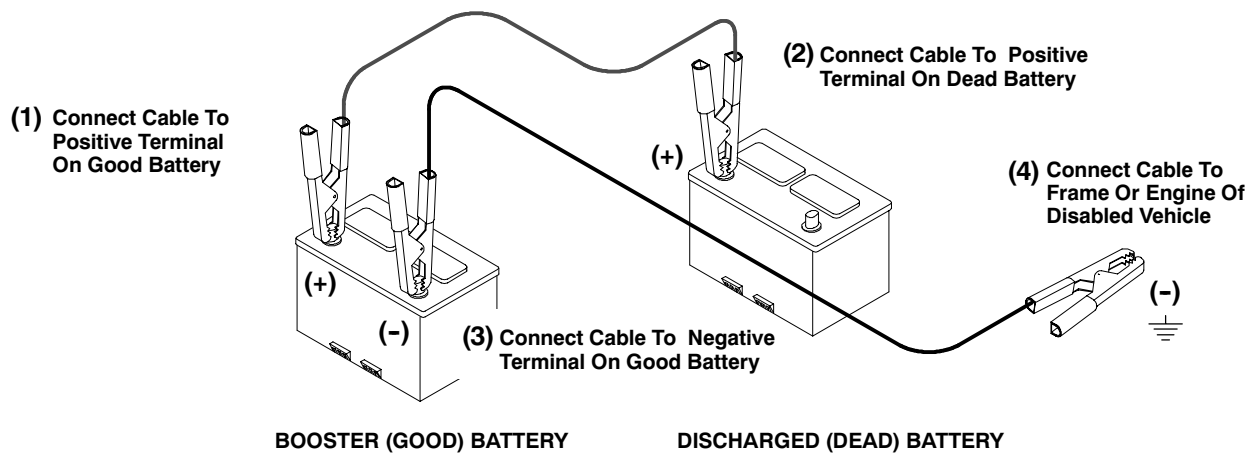
### WARNING

- **DO NOT** allow open flames or sparks near a battery when connecting for jump starting or while recharging the battery with a charger.
- Hydrogen gas is produced during the charging process and can be explosive. Provide adequate ventilation to prevent possible explosion.

## Jump Starting With a Booster Battery (con't.)

Both booster battery and discharged battery should be treated carefully when using jumper cables. Follow **exactly** the procedure outlined, being careful not to cause sparks.

1. Apply parking brake, put transmission in neutral and turn off all electrical loads.
2. Attach one end of one jumper cable to the positive (+) terminal of the booster battery and the other end to the positive (+) terminal of the discharged battery. **DO NOT permit vehicles to touch each other.**



3. Attach one end of remaining cable to the negative (-) terminal of the booster battery and the other end to a good ground on the vehicle or engine **away from the discharged battery**. **DO NOT lean over the battery when making this connection.**
4. Reverse this sequence **exactly** when removing the jumper cables.

### NOTICE

- This is a negative ground wiring system, reversing battery connection will damage alternator rectifier.
- Booster batteries used for starting must be connected with proper polarity.
- Vehicle battery cables should be **disconnected** before using a "Fast Charger."

## TOWING THE VEHICLE

### Manual Transmission

If for any reason the vehicle needs to be towed, follow the guidelines below to properly tow the vehicle.

If towing the vehicle with a tow-rope or a chain, an operator is required to steer the vehicle and to control the brakes.

### Towing the Vehicle con't.

Attach a tow line only to the front vertical frame member on either side of vehicle as shown in Figure 33.

Make sure the drive transmission is in “**neutral**” (out of gear) and the park brake is released.

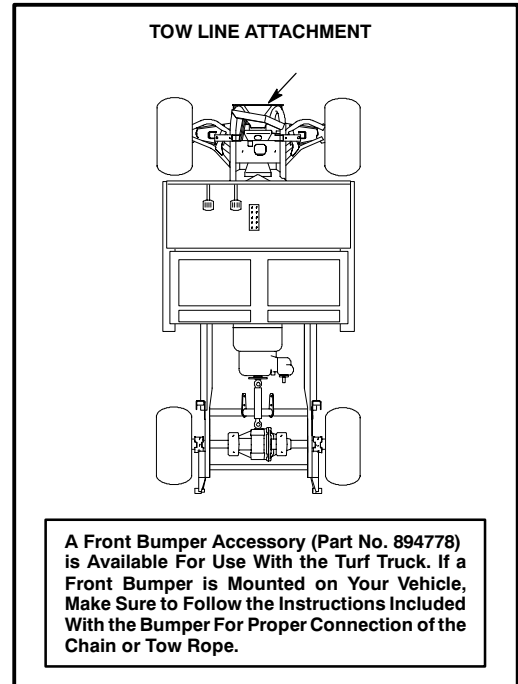
With the tow line attached, have the towing vehicle move forward until the tow line becomes tight.



#### WARNING

- **NEVER** tow the vehicle faster than 5 M.P.H. (8 km/h). Towing at excessive speed could cause either vehicle to lose proper steering control.

While towing, try to keep the tow line taught at all times. Be cautious going down inclines and while turning corners.



**Figure 33**  
**Tow Line Attachment Location**

### Automatic Transmission

When transporting the vehicle or when it is disabled, the **BEST** method of moving the vehicle is on a trailer. If that is not possible, the driveshaft **MUST** be removed before towing the vehicle.

If towing the vehicle with a tow-rope or a chain, an operator is required to steer the vehicle and to control the brakes.

Attach a tow line (tow line attaching locations are shown in Figure 33) only to the front vertical frame member of the vehicle.

Release the park brake and slowly move the towing vehicle forward until the tow line becomes tight.

Tow at a maximum speed of 5 m.p.h. (8 km/h).

While towing, try to keep the tow line taught at all times. Be cautious going down inclines and while turning corners.

If in an **EMERGENCY** and the vehicle must be towed **and** the drive shaft cannot be removed, attach a tow line to the front vertical frame member **ONLY**. Make sure the transmission is in “N” Neutral and the park brake is released. Tow at a maximum speed of 5 m.p.h. (8 km/h).

### JACKS, JACKING LOCATIONS AND USING A HOIST

A scissors type jack or a floor jack with a 1 1/2 ton (minimum) capacity that can be lowered to 3 3/8” (86 mm) height is required.

The jacking locations are shown in the chart illustration on the following page.

Put the gear selector in 1st gear (manual transmissions) or in “P” Park (for automatic transmissions). Apply the park brake. Raise the vehicle **ONLY** enough to perform maintenance required.

**Jacks, Jacking Locations and Using a Hoist (con't.)**

Place a jack in the appropriate location (See Fig. 35) and place a block behind (or in front) of the tire **diagonally opposite** the side which is being raised (See Fig. 34).



**WARNING**

- **DO NOT** rely solely on hydraulic or mechanical jacks for support. Use appropriate jack stands or equivalent for supporting the vehicle. If using a hoist, raise vehicle to appropriate height and support using jack stands or equivalent support.
- **Never** place feet, hands or any part of your body under the vehicle when raising it with a hoist.

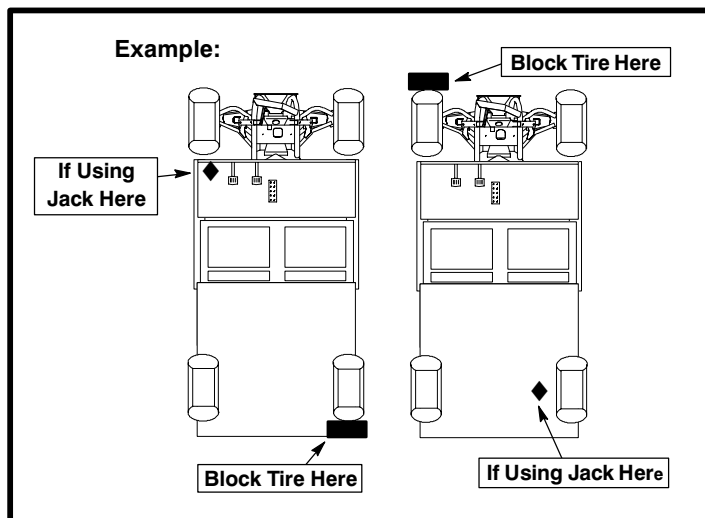
Jack the vehicle to the appropriate height and place jack stands or equivalent support beneath the frame near the jack. Lower the jack and allow the vehicle to rest on the jack stands.

**NOTICE**

- Raise the vehicle only enough to perform the maintenance required.

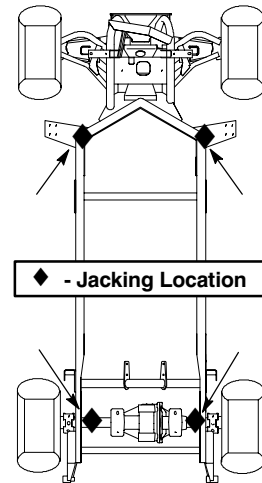
Raise the opposite side of the vehicle enough to allow the front tire to clear the ground. Place supports under the frame and lower the jack to allow the vehicle to rest on the jack stands.

**Make sure to block the tire diagonally opposite of the side which is being raised.**



**Figure 34  
Blocking Tires**

The illustration shows the frame without the body in order to show the jacking locations more clearly.



**Figure 35  
Jacking Locations**

**NOTICE**

- When using a hoist to raise the vehicle, use the same procedure for supporting the frame and blocking the tires as you would when using a jack.
- To prevent damage to the vehicle or attached accessory, **NEVER** use a hoist to raise only **one corner** of the vehicle. **ALWAYS raise BOTH front or rear corners equally.**

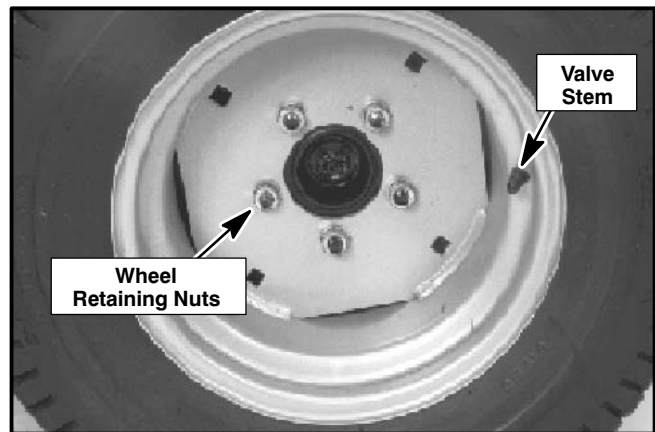
### TIRE REMOVAL Front & Rear

With the vehicle on a flat level surface (if possible), put the gear selector in first gear and apply the park brake.

Place a block in front of (or behind) the tire diagonally opposite the side which is being raised (**Refer to the “Jacks, Jacking Locations and Using a Hoist” section, Pages 26-27 in this manual.**)

Raise the vehicle only enough to perform the maintenance required.

1. Remove the wheel retaining nuts (See Fig 36) and remove tire and wheel assembly from hub.
2. Install the tire and wheel by reversing the above sequence. Make sure valve stem (See Fig 36) is located toward the outside.
3. Tighten wheel retaining nuts to 70 to 100 ft. lbs. (95 to 140 N·m) torque.



**Figure 36**  
**Wheel Retaining Nuts and Valve Stem**



#### **WARNING**

- ***DO NOT*** rely solely on hydraulic or mechanical jacks for support. Use appropriate jack stands or equivalent for supporting the vehicle. ***Never*** place feet, hands or any part of your body under the vehicle when raising it.



## SERVICING THE VEHICLE

### AIR CLEANER ELEMENT

This is a large capacity dry type air cleaner with a replaceable element.

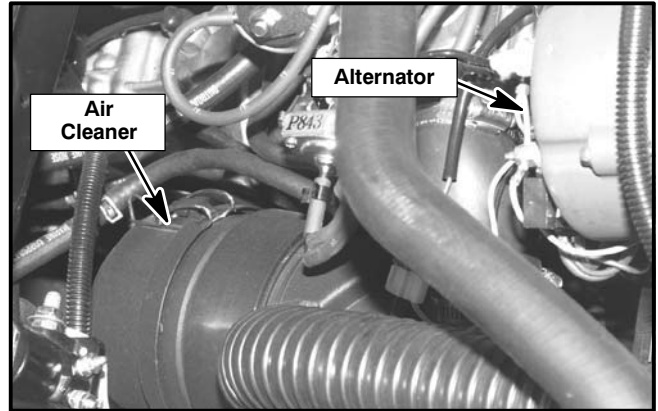
We recommend the filter element be **replaced** before engine performance is effected. This may occur at **250 hours** of service in very dirty operating conditions or at **500 hours** in normal operating conditions.

We **DO NOT** recommend cleaning the filter element because of the possibility of damaging the element.



#### WARNING

- **Before servicing or doing any maintenance work around the engine area, make sure the engine has had time to cool. Serious burns can result if the engine or surrounding area is hot.**



**Figure 37**  
**Air Cleaner Assembly**

**Air Cleaner Complete** . . . . . Part No. 892679  
**Air Cleaner Element** . . . . . Part No. 840352

### Checking and Installing the Element

Tilt the engine cover forward and locate the air cleaner on the right rear of the engine (See Fig. 37).

To remove the air cleaner element release the latches securing the cover to the air cleaner assembly. Remove the filter element.

Check the element for damage, pin holes, etc. by placing a light source such as a flashlight inside.

Clean dust from inside of housing with damp cloth, making sure dust does **NOT** enter air intake.

Check all gaskets to be sure they are **NOT** damaged or loose.

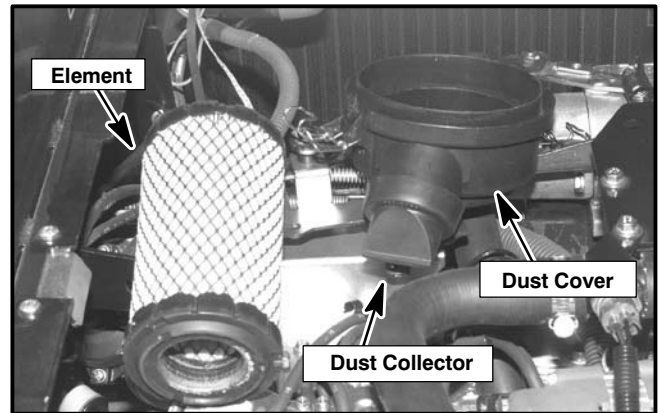
Replace the element if it is damaged or is excessively clogged with dirt and/or debris.

Insert element in housing open end first.

Position the cover so that the collector is pointing down. Clamp cover into position with collector pointing down.

- **DO NOT** use bent or dented air cleaner assemblies.
- **DO NOT** use bent or damaged air cleaner element.
- The dust collector empties automatically when properly installed with collector down.

A dirty, clogged or damaged air filter will cause the engine to start hard as well as run rough and sluggish. Don't forget to check the air cleaner element if the engine does not run smoothly and other problems cannot be found.



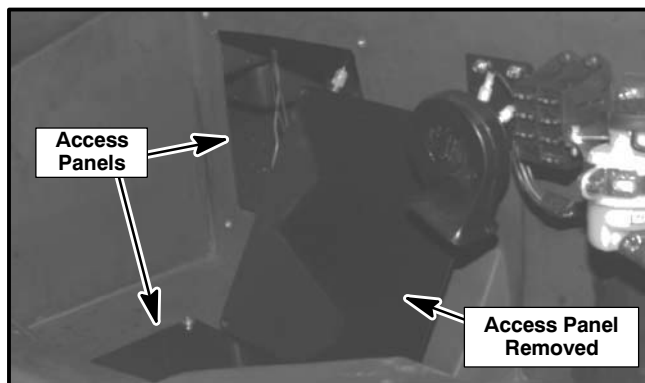
**Figure 38**  
**Air Cleaner Element and Dust Cover**  
**(Shown Removed From the Housing)**

## ACCESS PANELS

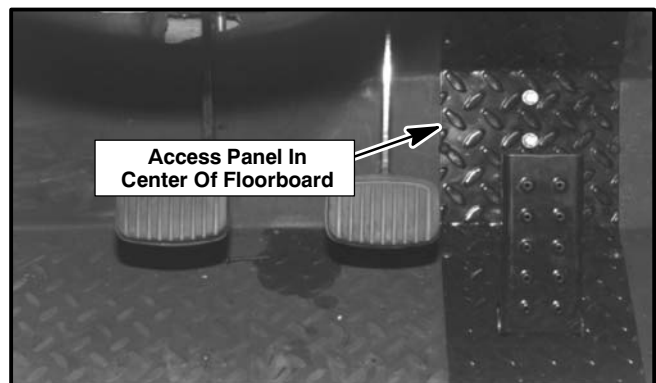
There are two access panels located under the front hood and one located in the middle of the floorboard.

Remove the screws securing the panel to the fire wall to gain access to the shifter linkage and some of the electrical wiring for the instrument panel.

Remove the screws securing the panel to the bottom of the front cowl to gain access to the front suspension.



**Figure 39**  
**Access Panels Under Front Cowl**



**Figure 40**  
**Access Panel on Floorboard**

Remove the screws securing the panel to the floorboard. This will give you access to the throttle cable, linkage, electrical wire harness, as well as the brake lines which run to the master cylinder.

***It will be necessary to remove the accelerator pedal in order to completely remove the center floorboard panel.***

## FRONT COWL ACCESS

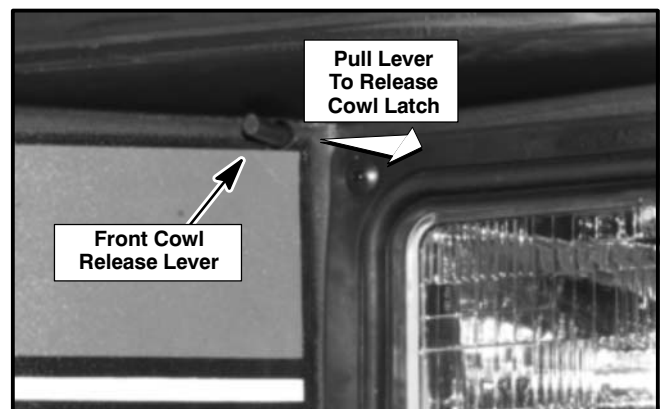
The front cowl opens to gain access to the fuse panel, the horn, the master cylinder reservoir as well as various access panels which when removed, allow access to wiring for the dash panel, shifting lever linkage and the upper part of the front suspension.

To open the front cowl, locate the release lever at the upper left corner near the left side headlight.

Pull the lever to the right to release the front cowl latch and at the same time pull up on the front cowl.

Open the cowl allowing it to rest against the rops structure (if equipped) or the steering wheel.

The front cowl will not “spring up” when the release lever is pulled. The cowl will have to be raised when the latch is released.



**Figure 41**  
**Release Lever For Front Cowl**

**LUBRICATION RECOMMENDATIONS**

- Transmission Fluid** . SAE EP 80-90 Gear Lube
- Automatic Transmission Fluid.** Mercon/Dexron II
- Differential Fluid** ... SAE EP 80-90 Gear Lube
- Power Steering** .... Power Steering Fluid (GM)
- Hydraulic Fluid** ..... Ransomes Turf Protector Biodegradable (Hyd Benz Bio 377)
- Brake Fluid** ..... Dot 3
- Pressure Gun Grease** ..... Lithium Base

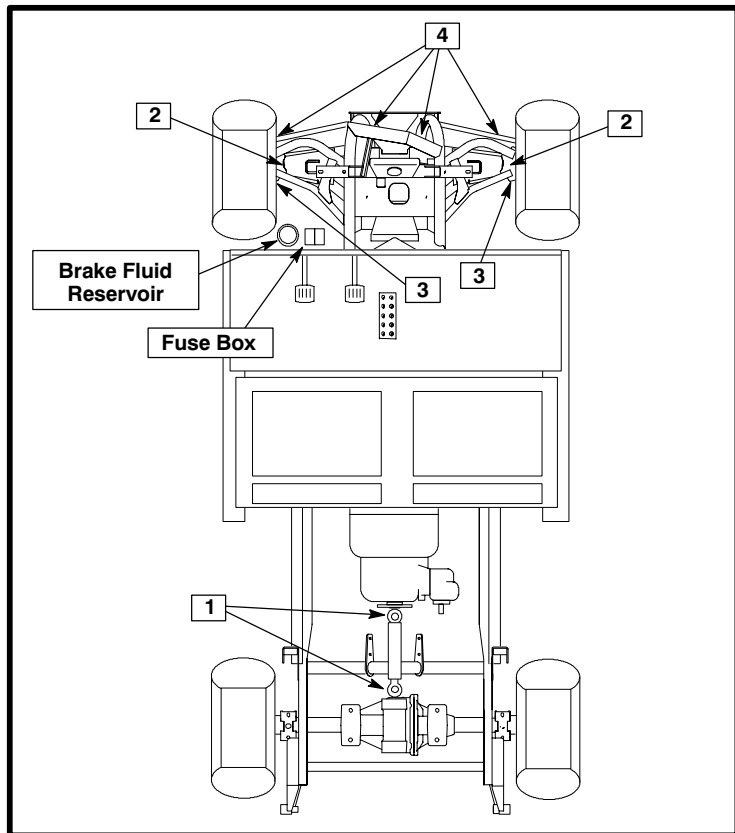
**LUBRICATION CHART**

Lubricate all chassis fittings with *lithium base* pressure gun grease every 100 hours or 1000 miles.

Ref. No.	Lubrication Area	Number Of Grease Fittings	Ref. No.	Lubrication Area	Number Of Grease Fittings
1	Drive shaft .....	2	3	Lower Ball Joint .....	2
2	Upper Ball Joints .....	2	4	Tie Rod Ends .....	4

**NOTICE**

Reference to item 1:  
Too much grease can damage the seals.



**Figure 42  
Lubrication Points**

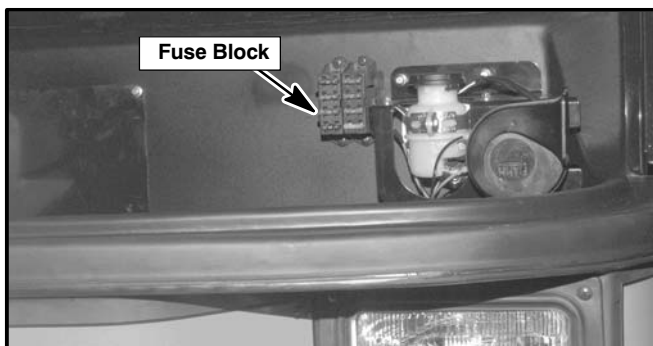
**FUSES**

The fuse box is located under the front cowl (See Fig. 43).

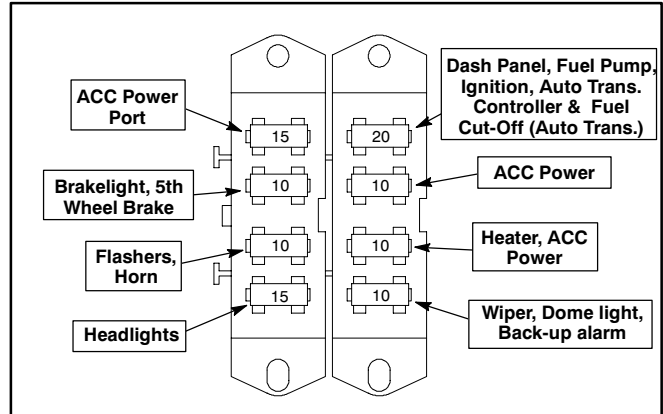
The fuses protect the electrical lighting circuits and accessory circuits such as the windshield washers, turn signals etc.

When replacing fuses, be sure the replacement fuse is the same amp as the fuse being replaced.

Pull straight out to remove a fuse. To install a fuse, push the new fuse into the appropriate fuse slot.



**Figure 43**  
Fuse Block Located Under Front Cowl



**Figure 44**  
Fuse Box Panel



**CAUTION**

- Electrical failure and/or fire can result if the fuses are not the proper amperage.

**BULBS, FUSES AND FLASHER**

<b>BULBS:</b>	Voltmeter light .....	No. GE 658	
	Oil pressure warning light .....	No. C194	
	Tachometer .....	No. C161	
	Water temperature gauge light .....	No. GE 658	
	Fuel gauge light .....	No. GE 658	
	Hour Meter Light .....	No. GE 658	
	Turn signal(s), front (accessory) .....	32 CP	No. 1156 .....
	Taillight(s) .....	32-4 CP	No. 1157 .....
	Headlight(s) .....	65-45 Watt	No. H6545 .....
			Part No. 837670
			Part No. 822049
			Part No. 837303
<b>FUSES:</b>	.....	10 AMP .....	Part No. 836892
	.....	15 AMP .....	Part No. 849983
	.....	20 AMP .....	Part No. 826000
	.....	30 AMP .....	Part No. 833038
<b>FLASHER:</b>	Turn signal (accessory) .....		Part No. 825501

## MAINTENANCE GUIDE

The following maintenance charts have been compiled as a general guideline for service intervals, based on hours of operation. Refer to the Engine Owner's Manual for further service and maintenance schedules and intervals.

Maintenance Operation	Daily	First 35 Hrs	First 50 Hrs	Every 75 Hrs or 2 months	Every 100 Hrs or 3 months
Check engine oil level	●				
Check cooling system coolant level	● <i>f</i>				
Clean radiator intake screen	●				
Check water separator, drain as required (diesel only)	●				
Check fuel level	●				
Check engine for loose parts, damage and leaks	●				
Check exhaust color (diesel only)	●				
Check for engine noise; vibration	●				
Check tire pressure	●				
Change engine oil and filter (Suzuki only)			●		● *
Change engine oil (Perkins Diesel)		●		● *	
Change engine oil filter (Perkins)		●		● *	
Check valve clearance (to be done by authorized dealer)		●			
Check engine idle speed		●			
Check power steering fluid		●			●
Change fuel filter					●
Lubricate chassis (see lube chart)					●
Check governor oil level (Suzuki engines)					●
Check differential oil level					●
Check transmission fluid level					●
Check hydraulic tank fluid level					●
Check brake fluid (BF)					●
Check brake adjustment					●
Check clutch adjustment					●
Change differential oil					After first 100 hrs.

\* Depending on operating conditions, the engine oil and engine filter may need more frequent replacement.

*f* If coolant level is low add a 50/50 mixture of water and anti-freeze, **NEVER** add straight anti-freeze to the coolant system

### OIL FILTER:

Suzuki K6A - Part No. 16510-82703  
 Suzuki 970 - Part No. 16510-82703  
 Perkins Diesel - Part No. 842553

### HYDRAULIC FLUID (Biodegradable):

2 1/2 gal. (9.5 L) - Part No. 65363  
 5 gal. (19 L) - Part No. 65352  
 55 gal. (208 L) - Part No. 65354

### FUEL FILTER:

Suzuki K6A - Part No. 15410-50F00  
 Perkins Diesel - Part No. 2208175  
 Suzuki 970 - Part No. 15410-50F00

# SERVICE & MAINTENANCE Cont.

## Maintenance Guide (con't.)

Maintenance Operation	Every 200 Hrs or 6 months	Every 400 Hrs or 9 months	Every 600 Hrs or 12 months	Every 1500 Hrs
Replace air cleaner element	● ‡			
Check valve clearance (See authorized dealer)	●			
Check fan belt and tension	●			
Inspect radiator hoses and clamps	●			
Change coolant		●		
Replace hydraulic system filter			●	
Change hydraulic system oil (tank only)			●	
Clean battery and terminals.			●	
Check alternator			●	
Repack front and rear wheel bearings			●	
Check starter motor brushes			●	
Check brake linings			●	
Change differential fluid			●	
Drain and replace radiator coolant			●	
Check engine idle speed			●	
Check glow plugs (diesel only)			●	
Check injection pump and timing (diesel only)			●	
Check fuel hoses and clamps			●	
Check all belts for tightness and cracking			●	
Adjust front brakes			●	
Replace timing belt (Suzuki engines)				●
Change transmission fluid			●	
Check fuel hoses and clamps			●	
Check spark plugs for fouling (clean and gap as necessary)			●	

\* Depending on operating conditions, the engine oil and engine filter may need more frequent replacement.

‡ Depending on operating conditions, the air filter element may require more frequent replacement.

### SPARK PLUGS:

Suzuki K6A:

Part No. 09482-00448 NGK DCPR7E

**OR**

Part No. 09482-00449 DensoXU22EPR-U  
gap .032" - .035" (0.8 mm - 0.9 mm)

Suzuki 970:

Part No. 09482-00131 NGK BP5ES

**OR**

Part No. 09482-00123 Denso W16EX-U  
gap .032" - .035" (0.8 mm - 0.9 mm)

### AIR CLEANER ELEMENT:

All Models - Part No. 840352

### TIMING BELT

Suzuki K6A - 11402-71D10

Suzuki 970 - 12761-78400

### ENGINE BELTS, Perkins Diesel

Part No. 844301 (alt, pwr strng)  
48" (1219 mm)

Part No. 841966 (hyd. pump, gov)  
29 1/2" (750 mm)

### ENGINE BELTS, Suzuki K6A:

Part No. 841027 (gov, hyd pump)  
53 1/4" (1352 mm)

Part No. 843998 (alt., pwr strng.)  
40" (1016 mm)

### ENGINE BELTS, Suzuki 970:

Part No. 836854 (alt, pwr strng)  
42" (1067 mm)

Part No. 844036 (gov, hyd pump)  
51" (1295 mm)

**BRAKES**

**Service Brakes**

 **WARNING**

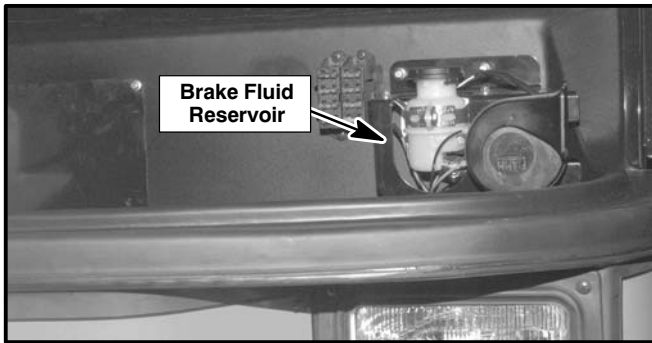
- Improper maintenance of the brake system may result in loss of vehicle control by the operator. Losing control of the vehicle due to brake loss may cause vehicle damage and/or injury to the operator or bystanders.

This vehicle is equipped with either four wheel or two wheel (rear only) hydraulic brakes and a hand operated park brake lever.

Keep your brake system clean and properly maintained.

If the brakes **Do Not** stop the vehicle properly, they must be repaired before the vehicle is operated again.

The brake fluid master cylinder reservoir is located under the front cowl.



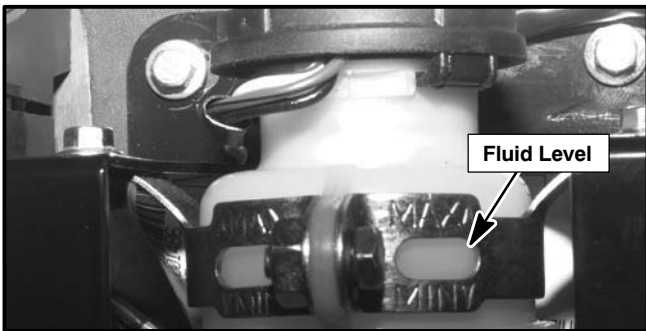
**Figure 45**

**Brake Fluid Reservoir Located Under Front Cowl**

The fluid level must be kept within the MIN (minimum) and MAX (maximum) levels as shown in Figure 46.

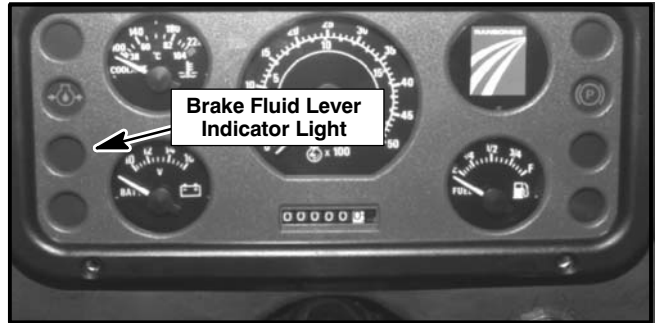
If the brake fluid level indicator light (See Fig. 47) comes on and remains on, check the brake fluid level in the reservoir.

When it is necessary to add fluid, use a **DOT 3 type** brake fluid.



**Figure 46**

**Brake Fluid Level Reading**



**Figure 47**

**Brake Fluid Level Indicator Light**

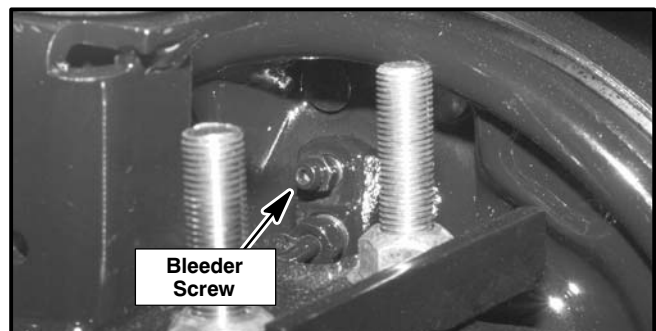
If the brakes do not hold properly, if they feel spongy **or** if the brake fluid reservoir is allowed to “run-dry”, it may be necessary to bleed the brake lines in order to get fluid back into the system. Follow the steps below to properly bleed the brake system.

**4-Wheel Brakes**

When bleeding the system, bleed the **left rear** brake first **then** the **right rear**, then the **right front** and finally the **left front**.

Attach a hose to the bleeder screw on top of the left rear dust shield and place the other end of the hose in a container to catch the fluid run-off when bleeding the system.

*Most communities have a disposal system for this type of refuse. **Please dispose** of fluids properly.*



**Figure 48**

**Bleeder Screw on Top of Dust Shield**

### Four Wheel Brakes (con't.)

Loosen the bleeder screw. Have an assistant push down on the brake pedal and hold pedal down. Tighten the bleeder screw and release the brake pedal. Loosen the bleeder screw again, press down on the brake pedal, hold pedal down and tighten the bleeder screw, release pedal. **Do Not** release the brake pedal until the bleeder screw is tightened otherwise air will be sucked back into the brake lines.

Continue this procedure until all air bubbles are purged from the system and a steady flow of fluid comes from the brake line. Repeat the procedure on the opposite side of the unit, then on the front.

### Rear Wheel Only Brakes

Bleed the left rear brake first then the right rear.

Attach a hose to the bleeder screw on top of the dust shield and place the other end of the hose in a container to catch the run-off when bleeding the system.

Loosen the bleeder screw. Have an assistant push down on the brake pedal and hold pedal down. Tighten the bleeder screw and release the brake pedal. Loosen the bleeder screw again, press down on the brake pedal, hold pedal down and tighten the bleeder screw, release pedal. **Do Not** release the brake pedal until the bleeder screw is tightened otherwise air will be sucked back into the brake lines.

Continue this procedure until all air bubbles are purged from the system and a steady flow of fluid comes from the brake line. Repeat the procedure on the opposite side of the unit.

## PARK BRAKE

The park brake applies the brakes to **both** rear wheels.

To engage the brake, pull up on the lever until park brake is applied (the park brake lever will be at an approximate 45° angle when applied).

To release, slightly pull up on the handle, push the button at the end of the lever and while holding the button in, lower the lever to it's original position.

### Park Brake Adjustment

Raise the engine cover and locate the park brake cable and bracket beneath the console panel (See Fig. 50).

With the park brake released (brake lever down) tighten the adjustment nut a couple of turns and apply the park brake, continue adjustment until the brake lever is at an approximate 45° when the brake is applied.

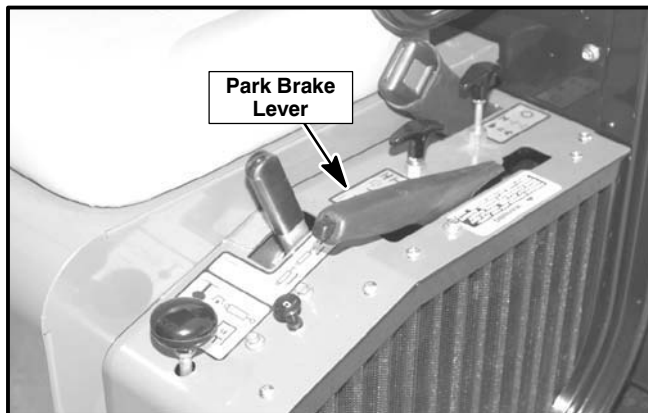


Figure 49  
Park Brake Lever Location

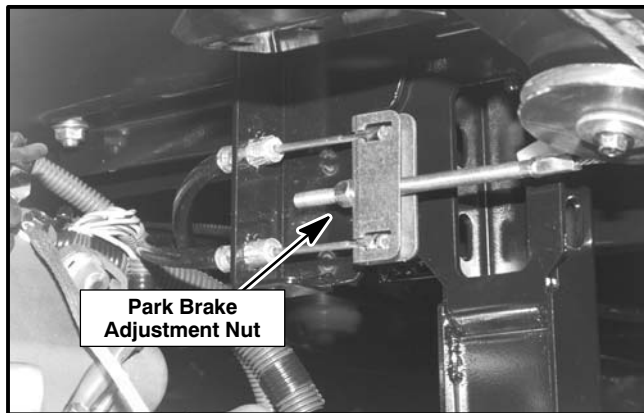


Figure 50  
Park Brake Adjustment Nut



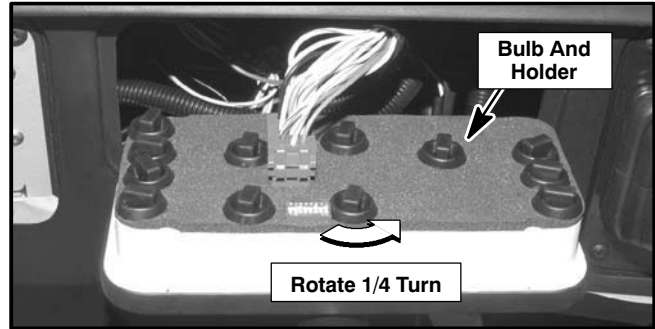
**BULB REPLACEMENT, DASH PANEL**

Remove the four (4) screws securing the instrument panel to the dash.

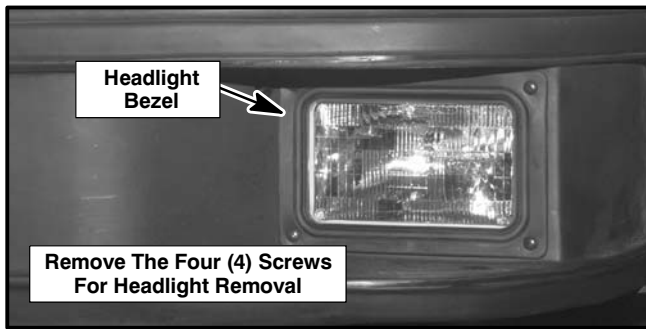
Pull the instrument panel out and tilt forward to gain access to the rear of the panel (See Fig. 51).

Determine which bulb will be replaced. Rotate the bulb holder 1/4 turn, pull up and remove holder and bulb. Remove the bulb from the holder and replace with the appropriate bulb. Reverse this sequence to install the bulb and holder.

**Use the number printed on the bulb to obtain the correct replacement bulb, also refer to the chart on Page 29 for bulb specifications.**



**Figure 51**  
**Dash Panel Bulb Removal**



**Figure 52**  
**Headlight Removal**

**HEADLIGHT REPLACEMENT**

Remove the four (4) screws securing the headlight bezel to the front cowl (See Fig. 52).

Pull the headlight and bezel from the front cowl opening. Disconnect the electrical connector from the rear of the headlight and remove the headlight from the bezel. Replace headlight and install in the reverse sequence used for removal.

- Headlight** . . . . . Part No. 837303
- Bezel** . . . . . Part No. 841428
- Mounting Screws** . . . Part No. 800943

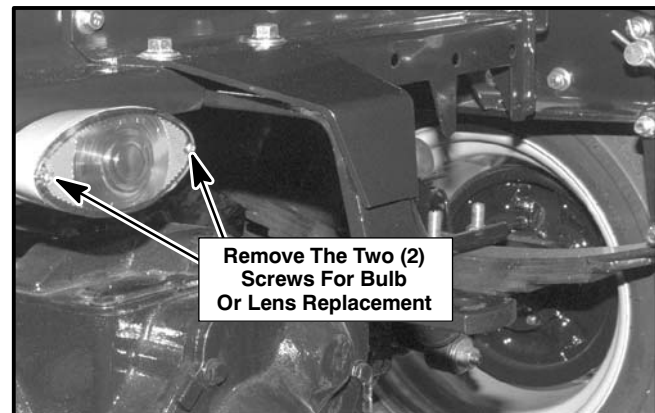
**BULB REPLACEMENT, TAILLIGHT**

Remove the two (2) screws securing the taillight lens to the taillight.

Remove the bulb and replace with a No. 1157 bulb. Replace the lens cover making sure the gasket is positioned correctly.

To remove the taillight from the vehicle, remove the two (2) nuts and shakeproof washers securing the taillight to the frame.

- Taillight Assembly** . . . . . Part No. 893602
- Bulb** . . . . . Part No. 822049
- Lens Screws** . . . . . Part No. 312288
- Lens and Gasket** . . . . . Part No. 829099
- License Illuminator Lens** . . . Part No. 829099



**Figure 53**  
**Taillight Bulb Replacement**

## SERVICE & MAINTENANCE

### GOVERNOR OIL LEVEL (Suzuki K6A & 970 Engines)

Check the oil level in the governor after **every 100 hours** of use. To check the level, remove the plug from the back side of the governor. Oil should be up to the level of the plug opening.

**Governor Oil Capacity** ..... 1.5 oz. (44 ml)

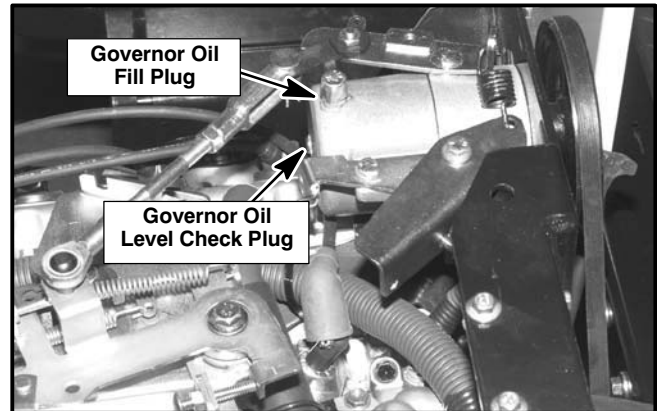
**Oil Type** ..... SAE 20W engine oil

If fluid level is low, add the recommended oil type.

Remove the plug from the rear side of the governor, remove the plug from the top of the governor and add an SAE 20W motor oil until the oil begins to leak from the rear port. Replace both plugs.

*When replacing the plug, use Teflon tape or a Permatex 20 sealant (or equivalent pipe thread sealant) on the threads of the plug.*

Torque the plugs to  $95 \pm 10$  in.lb.



**Figure 54**  
**Governor Fill Plug (Suzuki Engines Only)**

### DIFFERENTIAL (11.16:1)

The differential fluid should be checked every **100 hours (or 3 months)** and **changed** after the first **100 hours**. After the first change at 100 hours the fluid should be **changed** every **600 hours (or 12 months)**.

**Differential Fluid Capacity** . . . 5.2 pints. (2.5 L)

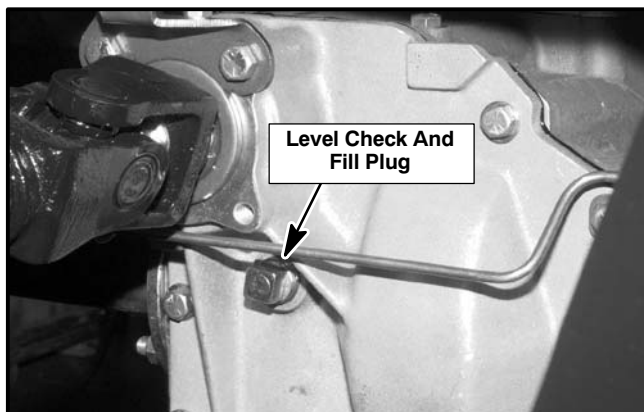
**Fluid Type** ..... SAE EP 80-90 Gear Lube

To check fluid level, remove the filler plug from the front of the differential.

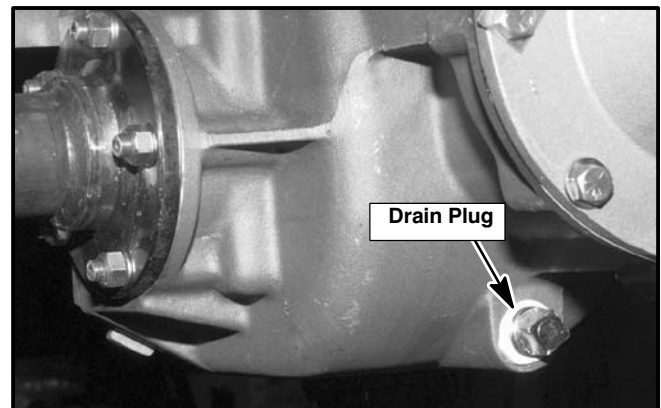
Fluid should be level with the bottom of the filler hole. If level is low, add gear lube until the appropriate level is reached (fluid will begin to leak from the filler hole when full level is reached). Replace filler plug.

To drain the differential fluid, remove the drain plug from the bottom rear of the differential and drain. Replace drain plug and add fluid to the recommended level.

When draining and filling the differential, use a pipe thread sealant on the plug threads before replacing them.



**Figure 55**  
**Differential Filler and Level Check Plug**



**Figure 56**  
**Differential Drain Plug**

**DRIVE TRANSMISSION**

Maintaining proper lubrication level in the transmission is very important to the life of the gears and bearings.

**Manual Transmission (Suzuki K6A Engine)**

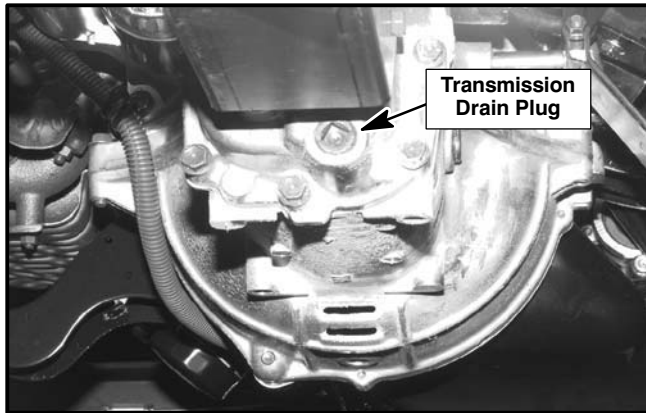
Check transmission fluid level every **100 hours (or 3 months)**.

Change transmission fluid every **600 hours** or **(12 months)**.

**Transmission Capacity:** 1.05 qts. (0.9 L)

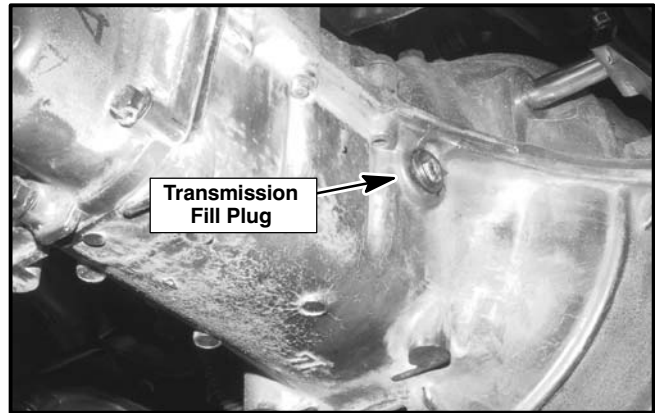
**Recommended Lubricant:** SAE EP 80-90 Gear Lube

The filler plug is located on the right side of the transmission. When removed, the filler plug opening is used to determine proper fluid level.



**Figure 57**

**Transmission Drain Plug (Suzuki K6A Engine)**



**Figure 58**

**Transmission Filler Plug (Suzuki K6A Engine)**

The fluid level must be level with the bottom of the filler plug hole.

If level is low, add fluid (through the filler hole) until it begins to flow from the filler hole. Reinstall the plug.

To drain the transmission fluid, remove the drain plug on the rear of the transmission.

When draining and filling the transmission, use a pipe thread sealant on the plug threads before replacing them.

**Manual Transmission (Suzuki 970 & Perkins Diesel Engines)**

Check transmission fluid level every **100 hours (or 3 months)**.

Change transmission fluid every **600 hours** or **(12 months)**.

**Transmission Capacity:** 1.34 qts. (1.3 L)

**Recommended Lubricant:** SAE EP 80-90 Gear Lube

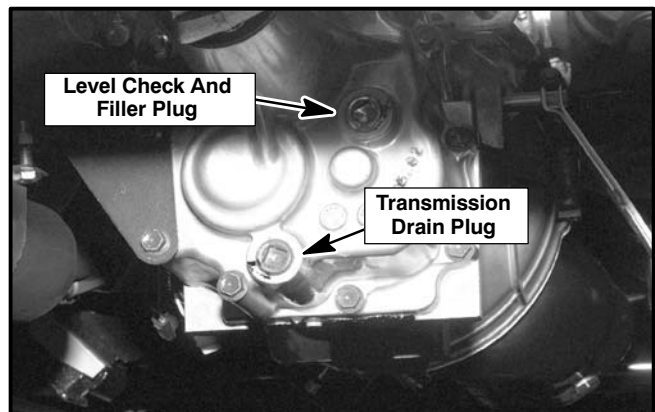
The filler plug is located on the rear of the transmission. When removed, the filler plug opening is used to determine proper fluid level.

The fluid level must be level with the bottom of the filler plug hole.

If level is low, add fluid (through the filler hole) until it begins to flow from the filler hole. Reinstall the plug.

To drain the transmission fluid, remove the drain plug on the rear of the transmission.

When draining and filling the transmission, use a pipe thread sealant on the plug threads before replacing them.



**Figure 59**

**Transmission Drain & Fill Plugs**

## SERVICE & MAINTENANCE Cont.

### Drive Transmission (con't.)

#### Automatic Transmission

Check transmission fluid level every **100 hours (or 3 months)**.  
Change transmission fluid every **600 hours or (12 months)**.

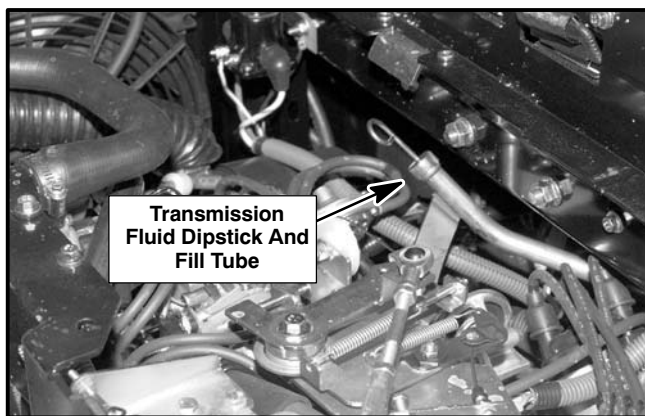
**Transmission Capacity:** 3.7 qts. (4.2 L)  
**Recommended Lubricant:** Mercon/Dexron II

To check the transmission fluid the engine must be running. Place the gear selector in "P" Park, apply the park brake and start the engine.

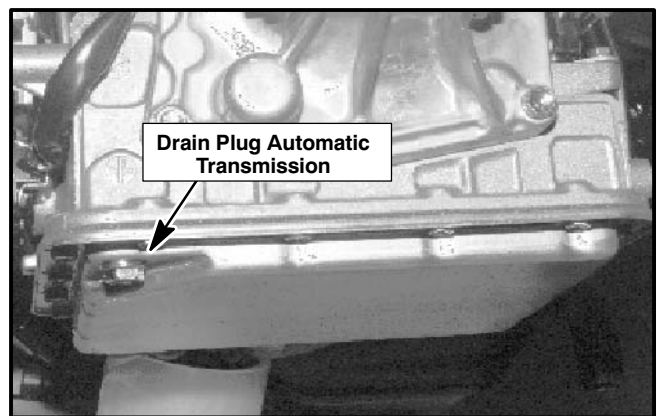
With the engine running, remove the dipstick and wipe it with a clean rag. Insert the dipstick into the extension tube until it contacts the tube. Remove the dipstick and read the fluid level.

Fluid must be kept between the two marks on the dipstick. If necessary, add fluid to obtain the proper level. **Do Not overfill.** Add fluid using the extension tube as the fill tube.

To drain the transmission fluid, remove the drain plug located on the bottom left, rear corner of the transmission pan.



**Figure 60**  
**Automatic Transmission Dip Stick**



**Figure 61**  
**Automatic Transmission Drain Plug**  
**(Suzuki K6A Engine)**

#### NOTICE

- Most communities have special sites to dispose of used petroleum based products such as transmission fluid, engine oil and differential fluid. Please use an appropriate container to catch any fluids and dispose of properly.

## ACCESSORIES, P.T.O. & HYDRAULIC ATTACHMENTS and 5th WHEEL IMPLEMENTS

There are numerous accessories, attachments and implements available for your vehicle.

Some accessories include:


- High/Low Hydraulics System
- Steel Cab Sets, Steel Door Sets
- Heater/Defroster
- Upper ROPS W/Seatbelt
- Dump Boxes and Platform Beds

Also attachments and implements like:

- the Quick Aerator, Core Harvester, TD 1500 & 2000 Top Dressers
- the Vicon Spreader, Turf Master Sprayers, Seed & Fertilizer Spreaders . . . . . and more

For information and availability on these accessories and others, contact your local Cushman Dealer.

**TOWING A TRAILER (Trailer Hitch)**

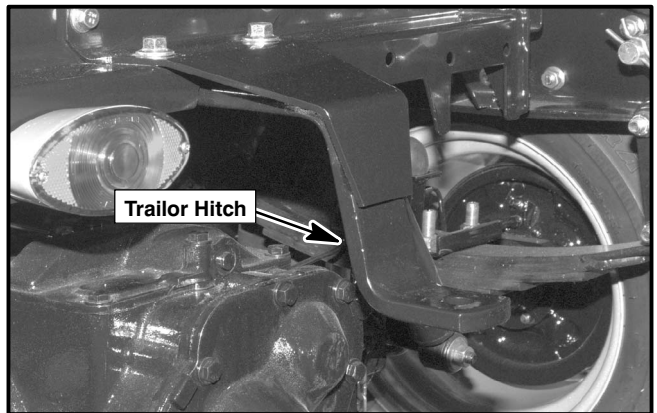


**WARNING**

- **NEVER** pull loads which may exceed the braking capacity of the vehicle. The operator must determine if the Cushman vehicle has adequate braking capacity to stop either a loaded or unloaded vehicle and the trailer on the type(s) of surface(s) and grade(s) on which the vehicle will be operated.
- Position the load on the trailer so that the tongue weight on the towing vehicle will not cause instability or affect steering control.
- **NEVER** make sudden stops, turns or accelerations when towing a trailer or equipment.

This vehicle is capable of pulling trailers and other equipment of greater weight than the vehicle itself, so **caution and good judgment** must be used to avoid losing control of the vehicle while braking or cornering.

Connect the equipment to be pulled to the trailer hitch on the rear of the vehicle. Secure using a tow pin or similar object. Be sure to secure the tow pin (or similar object) so it cannot fall out of the mounting hole.



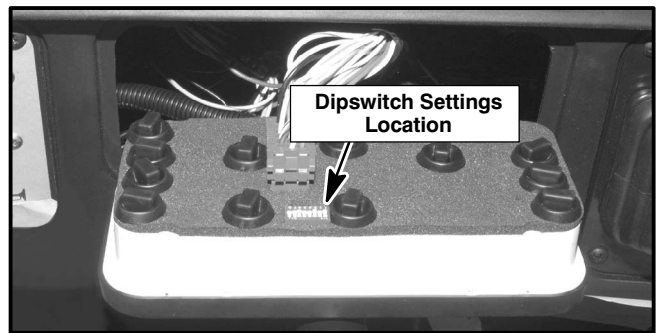
**Figure 62  
Trailer Hitch**

**DASH PANEL DIPSWITCH SETTINGS**

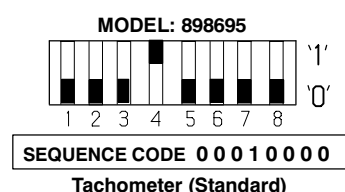
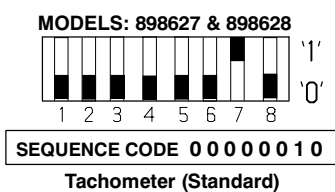
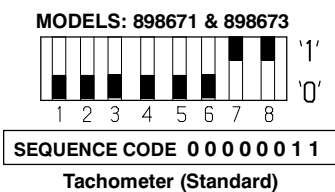
Remove the four (4) screws securing the instrument panel to the dash.

Pull the instrument panel out and tilt forward to gain access to the rear of the panel (See Fig. 63).

Using a small blade screwdriver or similar tool, push the switch levers either up or down using the following sequence codes (the top of the dash panel will be referenced as "position 1").



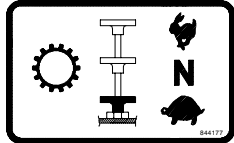
**Figure 63  
Dash Panel Dipswitch Location**



## EQUIPMENT

The following information will tell you about the different controls and functions used when operating the P.T.O. and hydraulics system. These features are used when operating the accessories and implements often used with this vehicle.

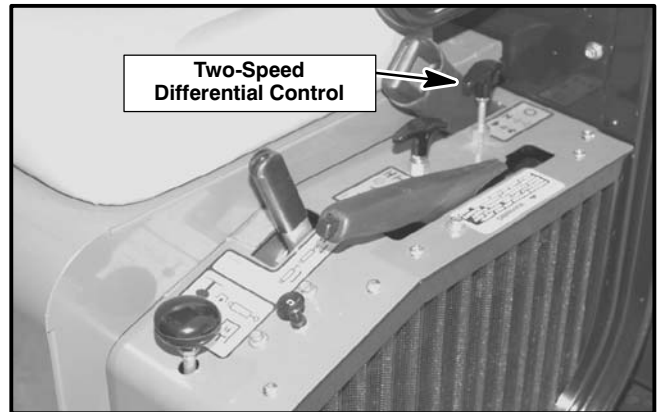
## TWO-SPEED DIFFERENTIAL



The two-speed differential has a high and low operating range, as well as a neutral position.

Shift the two-speed differential **ONLY** when the vehicle is **stopped**. Pull the control handle all the way UP to operate in the high range, push it all the way DOWN to operate in the low range.

The two-speed differential control is located on the control panel to the left of the operator's seat (See Fig. 64).



**Figure 64**  
**Two-speed Differential Control Handle**

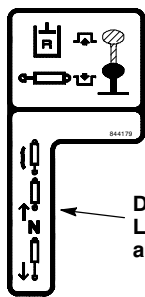
## POWER HYDRAULIC LIFT SYSTEM

The power hydraulic lift system is referred to as a "live" system. This means the hydraulic pump operates whenever the engine is running.

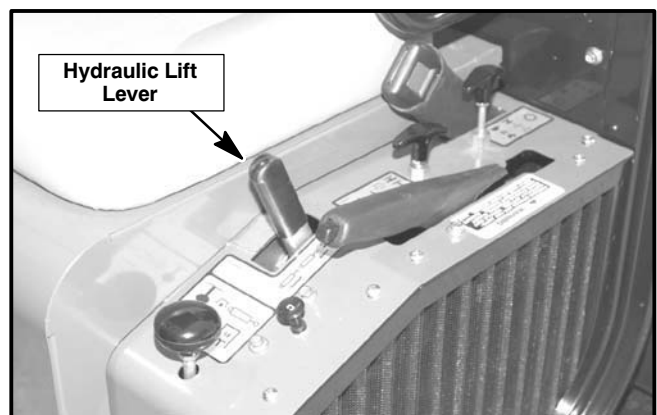
The hydraulic lift control lever is located on the control panel to the left of the driver's seat (See Fig. 65).

The hydraulic lift is used when the vehicle is equipped with a dump box or similar accessory.

Push the lever forward and to the right to latch it in the float position (the float position allows the accessory being used to follow the contour of the land, the accessory, when in the lowered position, will "float" over the ground even in undulating terrain).



Decal Shows  
Lever Positions  
and Their Function

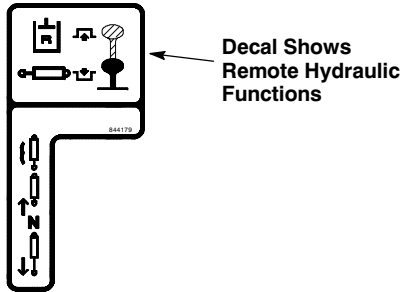


**Figure 65**  
**Hydraulic Lift Control Handle**

Pull back on the lever to extend the hydraulic cylinder ram (raise the dump box) push forward on the lever to retract the hydraulic cylinder ram (lower the dump box).

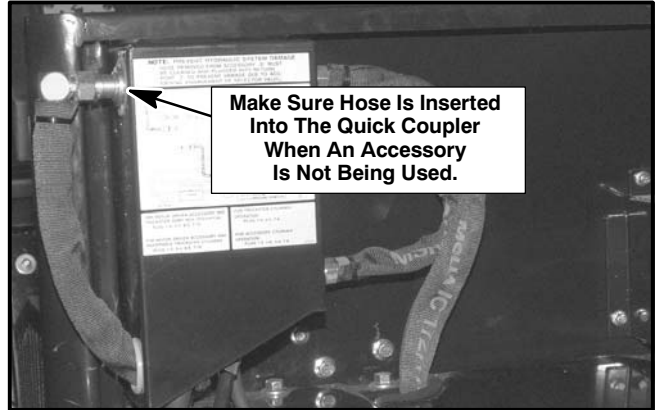
## REMOTE HYDRAULICS

The hydraulic system has a remote selector valve located at the front of the control panel, to operate accessories such as the Core Harvester™ or Top Dresser.

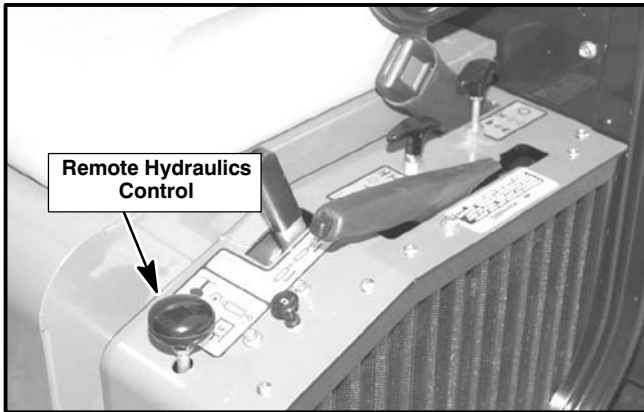


### NOTICE

- The “DOWN” position directs hydraulic oil to the standard vehicle hydraulic lift system.
- The “UP” position directs hydraulic oil to the left side of the hydraulic panel for remote hydraulic system use.



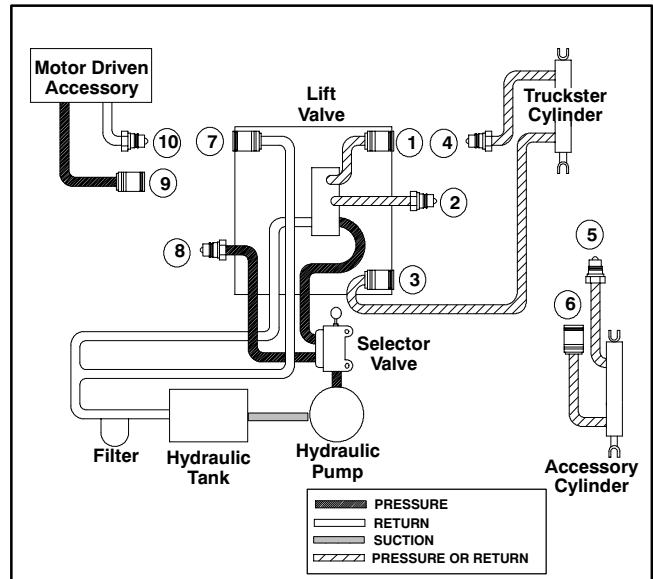
**Figure 67**  
Remote Hydraulics Closed Loop Shown



**Figure 66**  
Remote Hydraulics Control Handle

When the remote hydraulics are not connected to equipment, the male and female quick connectors must be connected to form a closed loop (See Fig. 66).

It is **extremely important** that the hose nipple be inserted into the quick connector to form a closed loop as shown. This will prevent dirt from entering the system and prevent the hydraulic system from over-heating, leading to system failure if the remote selector knob is accidentally pulled up with the accessory removed.



For Motor Driven Accessory And Truckster Dump Box Operation:  
Plug 1-4, 2-3, 8-9, 7-10.

For Truckster Cylinder Operation:  
Plug 1-4, 2-3, 7-8.

For Motor Driven Accessory And Inoperable Truckster Cylinder:  
Plug 1-2, 3-4, 8-9, 7-10.

For Accessory Cylinder Operation:  
Plug 1-5, 2-6, 4-3, 7-8.



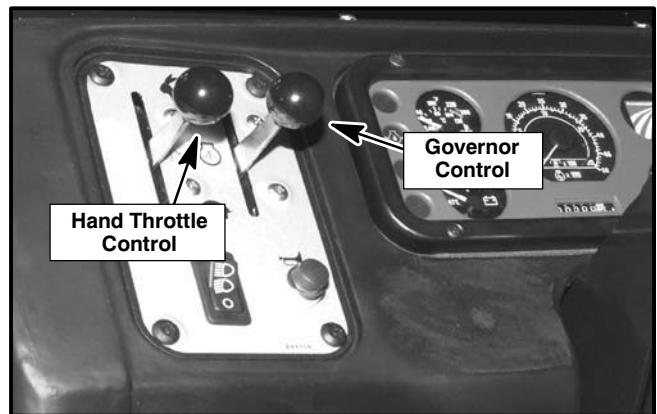
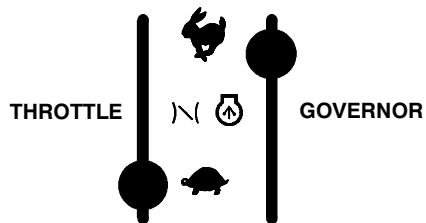
### WARNING

- The vehicle is equipped with a hydraulic system to operate equipment. During operation, **ALWAYS** stay clear of moving parts to prevent injury.

## OPERATING REMOTE HYDRAULICS Cont.

### GOVERNOR CONTROL AND HAND THROTTLE

A manually set, variable governor control is included with the P.T.O. for regulation of P.T.O. or ground speed. The control lever is attached to the panel to the left of the instrument panel. The hand throttle lever is attached to the same panel.



**Figure 68**  
**Governor and Hand Throttle Controls**

The engine governor is preset to control engine (vehicle) ground speeds to design limits

The engine governor is preset to control engine ground (vehicle) speeds to design limits.

Normal mode:

- Hand throttle control lever in “DOWN” position.
- Variable governor control in “UP” position.

#### NOTICE

- **(Diesel Only)** In the NORMAL MODE, the foot pedal throttle retains full control of throttle lever position. An internal governor adjusts the injector pump to compensate for variations in power requirements (maintains R.P.M. dictated by position of foot pedal throttle).



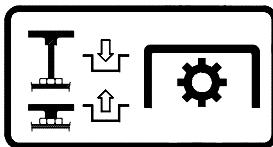
#### WARNING

- To prevent speeds greater than design limits, **NEVER** alter the governor controls in any manner to increase speed beyond the recommended maximum R.P.M. Over-speeding may result in engine failure and possible injury to operator and/or bystanders.

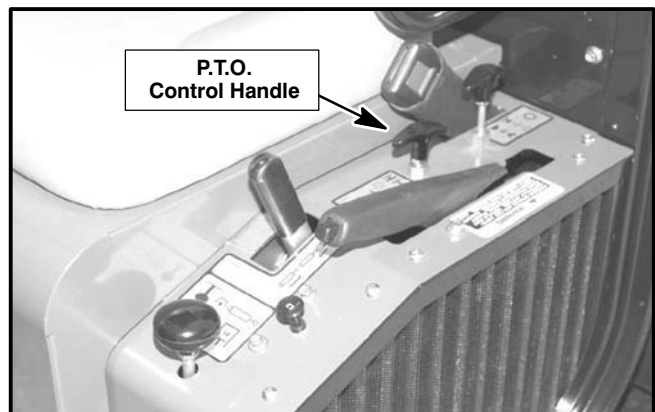
### POWER TAKE OFF (Mechanical P.T.O.)

There is also an optional hydraulic powered P.T.O. system available. Refer to the section Power Take-Off (Hydraulic P.T.O.) for proper operating instructions.

The P.T.O. transmits power from the transmission to a splined shaft at the rear of the vehicle for easy hook-up to optional equipment.



The control handle is located on the control panel to the left of the operator's seat.



**Figure 69**  
**P.T.O. Control Handle Location**  
**PULL UP to engage. - PUSH DOWN to disengage.**



## Power Take Off (Mechanical P.T.O.) con't.



### WARNING

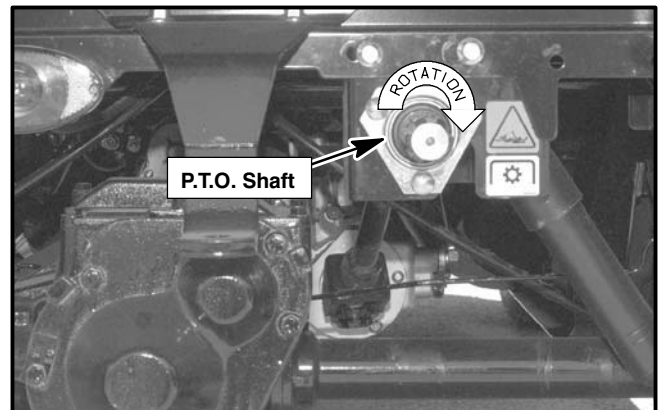
- When an attachment is not connected to the P.T.O. shaft, disengage drive to the P.T.O. by pushing control handle down.
- P.T.O. includes a spring loaded P.T.O. cover. This cover must remain on the vehicle and be used at all times. An uncovered rotating spline can catch clothing and result in serious injury or death. **ALWAYS** remain clear of the P.T.O. shaft and all moving parts.
- If you do not want the vehicle to move, **ALWAYS** make sure the transmission is out of gear and the park brake is applied when the clutch pedal is released to activate the P.T.O. shaft. Make sure the vehicle is in Park with the park brake applied for automatic transmissions.
- **ALWAYS** disengage the P.T.O. before attaching any equipment to the P.T.O. shaft.

### NOTICE

- To engage P.T.O. **ALWAYS STOP** the vehicle. For vehicles with manual transmissions, stop the vehicle, push the clutch pedal in **THEN** pull the P.T.O. control knob upward.

### For Use When The Vehicle Is Stationary

1. Make sure governor control is in the "UP" position.
2. Make sure differential is in either **HIGH** or **LOW** range, **NOT the NEUTRAL position**.
3. Set (engage) the parking brake.
4. Put transmission in neutral (out of gear) and engage the clutch (put automatic transmission in Park).
5. Push foot throttle pedal to floorboard.
6. Raise the hand throttle control lever to full engine R.P.M.
7. Move the governor control lever to desired engine R.P.M.



**Figure 70**  
**P.T.O. Shaft Location**

### For Use While Vehicle Is Moving

1. Refer to the Power Take-Off R.P.M./Vehicle Speed chart (see Page 50) to select the proper P.T.O. and ground speed combination for the accessory equipment being used, there is also a decal representing the P.T.O. and ground speed combinations located on the same panel as the P.T.O. control handle.
2. Make sure the governor control lever is all the way **DOWN** so that the engine is held at idle speed.
3. Push the foot throttle pedal to the floorboard.
4. Position the governor control lever to obtain engine R.P.M. corresponding to the desired P.T.O. and vehicle ground speed.
5. Put transmission in desired gear, engage clutch (for vehicles with manual transmissions) and depress foot throttle.

## OPERATING REMOTE HYDRAULICS Cont.

### Power Take Off (Mechanical P.T.O.) con't.

The P.T.O. may be stopped momentarily by pushing the clutch pedal in (on vehicles with manual transmissions). When the clutch pedal is released the P.T.O. will start again.

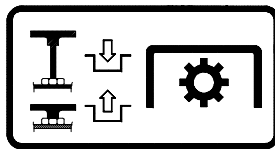


#### WARNING

- **NEVER** attempt to drive the vehicle with the engine speed increased by the hand throttle. The hand throttle also controls the foot throttle, so the foot throttle pedal cannot be used to reduce engine and vehicle speed. **FAILURE** to obey this warning may result in you, the operator, losing vehicle control.

### POWER TAKE OFF (Hydraulic P.T.O.)

The hydraulic P.T.O. transmits power from the transmission to a splined shaft at the rear of the vehicle for easy hook-up to optional equipment.



The control handle is located on the control panel to the left of the operator's seat.

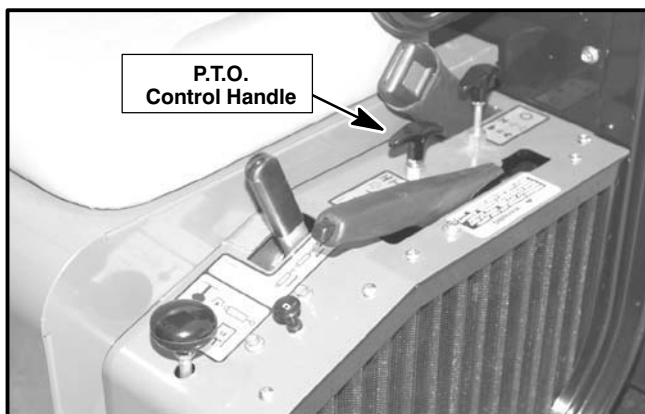


Figure 71

#### P.T.O. Control Handle Location

**PULL UP** to engage. - **PUSH DOWN** to disengage.

To activate the P.T.O., move the live hydraulic hose from the **upper coupler** on the left side of the hydraulic panel to the **lower coupler** on the left side of the panel.

Make sure the hydraulic P.T.O. control handle is in the **down** position (if the control handle **is not down** the P.T.O. shaft can start rotating).

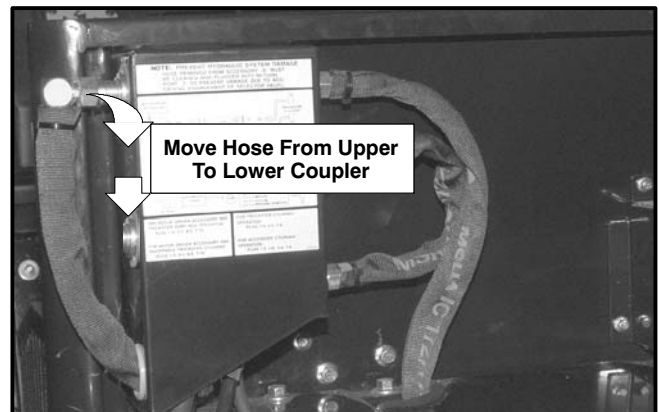


Figure 72

#### Moving Live Hydraulic Hose for Hydraulic P.T.O.



#### WARNING

- When an attachment is not connected to the P.T.O. shaft, disengage drive to the P.T.O. by pushing the hydraulic control handle down and replacing the live hydraulic hose in the **upper coupler**.
- The PTO runs when the control handle is **up**. Depressing the clutch pedal **Does Not** stop the PTO from running, the control handle must be in the down position for the PTO to stop.
- P.T.O. includes a spring loaded P.T.O. cover. This cover must remain on the vehicle and be used at all times. An uncovered rotating spline can catch clothing and result in serious injury or death.

## Power Take Off (Hydraulic P.T.O.) con't.

### NOTICE

- To engage P.T.O. **ALWAYS STOP** the vehicle. For vehicles with manual transmissions, stop the vehicle, push the clutch pedal in **THEN** pull the P.T.O. control knob upward.

### For Use When The Vehicle Is Stationary

1. Make sure governor control is in "UP" position.
2. Set (engage) the parking brake.
3. Put transmission in neutral (out of gear) and engage the clutch (put automatic transmission in Park).
4. Push foot throttle pedal to floorboard.
5. Raise the hand throttle control lever to full engine R.P.M.
6. Move the governor control lever to desired engine R.P.M.

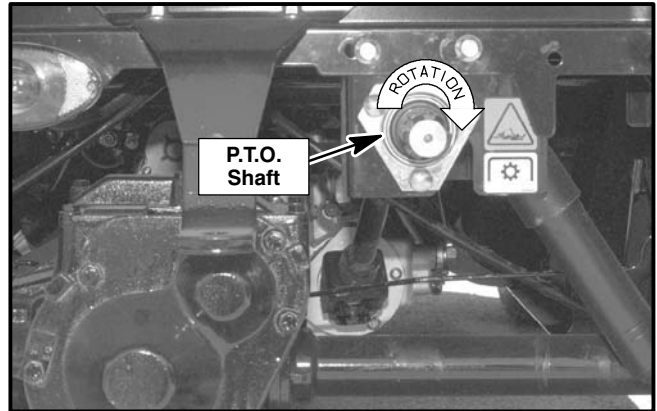


Figure 73  
P.T.O. Shaft Location



### WARNING

- If you do not want the vehicle to move, **ALWAYS** make sure the transmission is out of gear and the park brake is applied when the clutch pedal is released to activate the P.T.O. shaft. Make sure the vehicle is in Park with the park brake applied for automatic transmissions.
- **ALWAYS** disengage the P.T.O. before attaching any equipment to the P.T.O. shaft. **ALWAYS** remain clear of the P.T.O. shaft and all moving parts.

### For Use While Vehicle Is Moving

1. Refer to the Power Take-Off R.P.M./Vehicle Speed chart (see Page 50) to select the proper P.T.O. and ground speed combination for the accessory equipment being used, there is also a decal representing the P.T.O. and ground speed combinations located on the same panel as the P.T.O. control handle.
2. Position the governor control lever to obtain engine R.P.M. corresponding to the desired P.T.O. and vehicle ground speed.
3. Put transmission in desired gear, engage clutch (for vehicles with manual transmissions) and depress foot throttle.
4. Pull up on the hydraulic P.T.O. control handle to start P.T.O. operation. **The P.T.O. can only be stopped by pushing the control handle down.**



### WARNING

- **NEVER** attempt to drive the vehicle with the engine speed increased by the hand throttle. The hand throttle also controls the foot throttle, so the foot throttle pedal cannot be used to reduce engine and vehicle speed. **FAILURE** to obey this warning may result in you, the operator, losing vehicle control.

# OPERATING REMOTE HYDRAULICS Cont.

## GROUND SPEED CHARTS

The following decal/charts show the vehicle's ground speed in relation to the P.T.O.'s rpm. Select the proper p.t.o. and ground speed combination for the accessory equipment being used.

The decals are applied to each of the appropriate turf models and are shown below with correct model identity. Please replace any decal which may become damaged and/or hard to read.

KPH			KPH			RPM	MPH			MPH		
1	2	3	1	2	3		1	2	3	1	2	3
2.3	4.0	6.1	7.2	13.5	19.7	2500	1.4	2.5	3.8	4.5	8.4	12.2
2.4	4.3	6.6	7.8	14.5	21.3	2700	1.5	2.7	4.1	4.9	9.0	13.2
2.6	4.6	7.1	8.4	15.6	22.9	2900	1.6	2.9	4.4	5.2	9.7	14.2
2.8	4.9	7.6	9.0	16.7	24.4	3100	1.7	3.1	4.7	5.6	10.4	15.2
3.0	5.3	8.1	9.5	17.8	26.0	3300	1.9	3.3	5.0	5.9	11.0	16.2
3.2	5.6	8.6	10.1	18.9	27.6	3500	2.0	3.5	5.3	6.3	11.7	17.1
3.3	5.9	9.1	10.7	19.9	29.2	3700	2.1	3.7	5.7	6.7	12.4	18.1
3.5	6.2	9.6	11.3	21.0	30.7	3900	2.2	3.9	6.0	7.0	13.1	19.1
3.7	6.5	10.1	11.9	22.1	32.3	4100	2.3	4.1	6.3	7.4	13.7	20.1
3.9	6.8	10.6	12.4	23.2	33.9	4300	2.4	4.3	6.6	7.7	14.4	21.1
4.1	7.2	11.1	13.0	24.2	35.5	4500	2.5	4.4	6.9	8.1	15.1	22.0

898659 845231

For use with Turf Model 898628  
Suzuki K6A  
with automatic transmission

For use with Turf Models 898627  
Suzuki K6A  
with manual transmission

KPH				KPH				RPM	MPH				MPH			
1	2	3	4	1	2	3	4		1	2	3	4	1	2	3	4
1.5	2.6	4.2	6.1	4.9	8.4	13.5	19.7	2500	1.0	1.6	2.6	3.8	3.0	5.2	8.4	11.2
1.7	2.8	4.5	6.6	5.3	9.1	14.5	21.3	2700	1.0	1.8	2.8	4.1	3.3	5.6	9.0	13.2
1.8	3.0	4.8	7.1	5.7	9.8	15.6	22.9	2900	1.1	1.9	3.0	4.4	3.5	6.1	9.7	14.2
1.9	3.3	5.2	7.6	6.1	10.4	16.7	24.4	3100	1.2	2.0	3.2	4.7	3.8	6.5	10.4	15.2
2.0	3.5	5.5	8.1	6.4	11.1	17.8	26.0	3300	1.3	2.2	3.4	5.0	4.0	6.9	11.0	16.2
2.2	3.7	5.8	8.6	6.8	11.8	18.9	27.6	3500	1.3	2.3	3.6	5.3	4.2	7.3	11.7	17.1
2.3	3.9	6.2	9.1	7.2	12.4	19.9	29.2	3700	1.4	2.4	3.8	5.7	4.5	7.7	12.4	18.1
2.4	4.1	6.5	9.6	7.6	13.1	21.0	30.7	3900	1.5	2.5	4.0	6.0	4.7	8.2	13.1	19.1
2.5	4.3	6.8	10.1	8.0	13.8	22.1	32.3	4100	1.6	2.7	4.2	6.3	5.0	8.6	13.7	20.1
2.6	4.5	7.2	10.6	8.4	14.5	23.2	33.9	4300	1.6	2.8	4.4	6.6	5.2	9.0	14.4	21.1
2.8	4.7	7.5	11.1	8.8	15.1	24.2	35.5	4500	1.7	2.9	4.7	6.9	5.5	9.4	15.1	22.0

898650, 898652 845232

For use with Turf Model 898671  
Suzuki 970 manual transmission

KPH				KPH				RPM	MPH				MPH			
1	2	3	4	1	2	3	4		1	2	3	4	1	2	3	4
1.4	2.6	3.5	5.1	4.4	8.3	11.3	16.1	1600	0.9	1.6	2.2	3.2	2.8	5.2	7.1	10.0
1.5	2.9	4.0	5.7	5.0	9.3	12.8	18.1	1800	1.0	1.8	2.5	3.5	3.1	5.6	7.9	11.3
1.7	3.2	4.4	6.3	5.5	10.4	14.2	20.1	2000	1.1	2.0	2.8	3.9	3.4	6.4	8.8	12.5
1.9	3.5	4.9	7.0	6.1	11.4	15.6	22.1	2200	1.2	2.2	3.0	4.3	3.8	7.1	9.7	13.8
2.1	3.9	5.3	7.6	6.6	12.4	17.0	24.1	2400	1.3	2.4	3.3	4.7	4.1	7.7	10.6	15.0
2.2	4.2	5.8	8.2	7.2	13.5	18.4	26.2	2600	1.4	2.6	3.6	5.1	4.5	8.4	11.5	16.3
2.4	4.5	6.2	8.9	7.7	14.5	19.9	28.2	2800	1.5	2.8	3.9	5.5	4.8	9.0	12.3	17.5
2.6	4.8	6.6	9.5	8.3	15.5	21.3	30.2	3000	1.6	3.0	4.1	5.9	5.2	9.7	13.2	18.8
2.7	5.1	7.1	10.1	8.9	16.6	22.7	32.2	3200	1.7	3.2	4.4	6.3	5.5	10.3	14.1	20.0
2.9	5.5	7.4	10.6	9.4	17.5	24.0	34.2	3400	1.8	3.4	4.6	6.6	5.9	10.9	14.9	21.3
3.1	5.8	7.9	11.3	10.0	18.5	25.4	36.2	3600	1.9	3.6	4.9	7.0	6.2	11.5	15.8	22.5

845233

For use with Turf Models 898673 and 898695  
Perkins Diesel with manual transmission

KPH				KPH				RPM	MPH				MPH			
1	2	3	4	1	2	3	4		1	2	3	4	1	2	3	4
1.4	2.6	3.5	5.1	4.4	8.3	11.3	16.1	1600	0.9	1.6	2.2	3.2	2.8	5.2	7.1	10.0
1.5	2.9	4.0	5.7	5.0	9.3	12.8	18.1	1800	1.0	1.8	2.5	3.5	3.1	5.6	7.9	11.3
1.7	3.2	4.4	6.3	5.5	10.4	14.2	20.1	2000	1.1	2.0	2.8	3.9	3.4	6.4	8.8	12.5
1.9	3.5	4.9	7.0	6.1	11.4	15.6	22.1	2200	1.2	2.2	3.0	4.3	3.8	7.1	9.7	13.8
2.1	3.9	5.3	7.6	6.6	12.4	17.0	24.1	2400	1.3	2.4	3.3	4.7	4.1	7.7	10.6	15.0
2.2	4.2	5.8	8.2	7.2	13.5	18.4	26.2	2600	1.4	2.6	3.6	5.1	4.5	8.4	11.5	16.3
2.4	4.5	6.2	8.9	7.7	14.5	19.9	28.2	2800	1.5	2.8	3.9	5.5	4.8	9.0	12.3	17.5
2.6	4.8	6.6	9.5	8.3	15.5	21.3	30.2	3000	1.6	3.0	4.1	5.9	5.2	9.7	13.2	18.8
2.7	5.1	7.1	10.1	8.9	16.6	22.7	32.2	3200	1.7	3.2	4.4	6.3	5.5	10.3	14.1	20.0

845234

## HYDRAULIC RESERVOIR

Normally the hydraulic system will not need additional fluid. Sometimes a leak may develop causing the system to require repair and refilling. If you notice hydraulic fluid escaping when the system is being used or if a leak is suspected, **turn off all hydraulic functions and stop the engine.**

Check the hoses and fittings to determine where the fluid may be escaping from. If necessary, start the engine and using a piece of cardboard or similar material, check areas where the leak is suspected. Repair as needed.



### WARNING

- Escaping hydraulic oil under pressure can have sufficient force to penetrate the skin, causing serious injury.
- After applying pressure to the system, use a piece of cardboard or wood, **NOT** your hands, to check for leaks.
- If injured by escaping fluid, see doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately.

Periodically check the hydraulic fluid level (hydraulic level should be checked every **100 hours** of operation). Loss of fluid can signal a small leak before it becomes worse.

To check the hydraulic fluid level:

1. Place vehicle on level surface. Fully lower any accessory attachment, including dump box. Stop the vehicle engine.
2. Remove the dipstick/breather plug from the top of the tank (See Figs. 74 and 75). Wipe the dipstick, then place in tank with the threaded flange resting on the tank (do not screw in). Fluid should show on the knurled portion of the dipstick (See Fig. 75). Add fluid as required.

If additional fluid is needed, add **Ransomes Turf Protector Biodegradable hydraulic fluid.**

3. Screw the dipstick/breather plug securely in place.

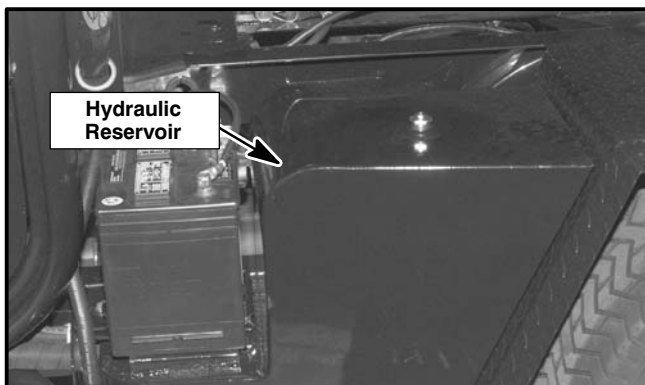
**NOTE: Do Not** overfill the hydraulic system. Severe damage may result.  
**Always** reinstall the dipstick/breather plug.

#### Hydraulic System Capacity:

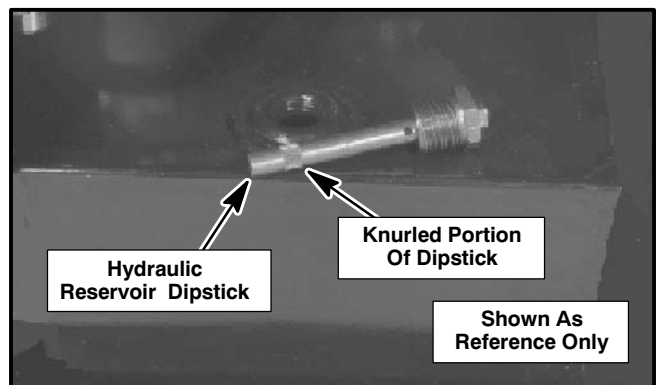
Standard Hydraulics . . . . . 4 gal. (15.0 L)  
Hi-Lo Hydraulics . . . . . 7.6 gal. (28.8 L)

#### Hydraulic Fluid (Biodegradable):

2 1/2 gal. (9.5 L) . . . . . Part No. 65363  
5 gal. (19.0 L) . . . . . Part No. 65352  
55 gal. (208.0 L) . . . . . Part No. 65354

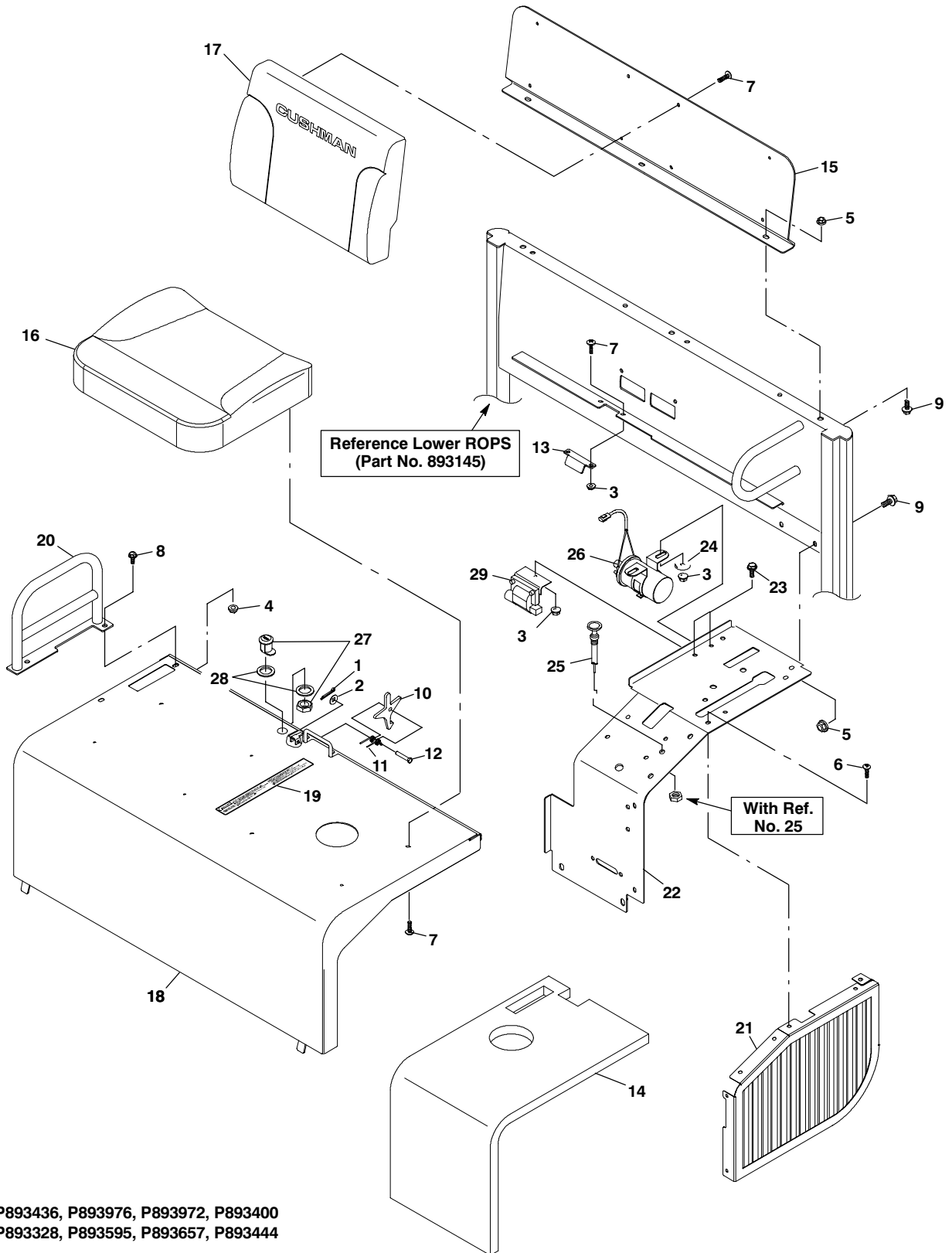


**Figure 74**  
**Hydraulic Reservoir Tank**



**Figure 75**  
**Hydraulic Tank Dipstick**

# ENGINE COVER



P893436, P893976, P893972, P893400  
P893328, P893595, P893657, P893444

## ENGINE COVER

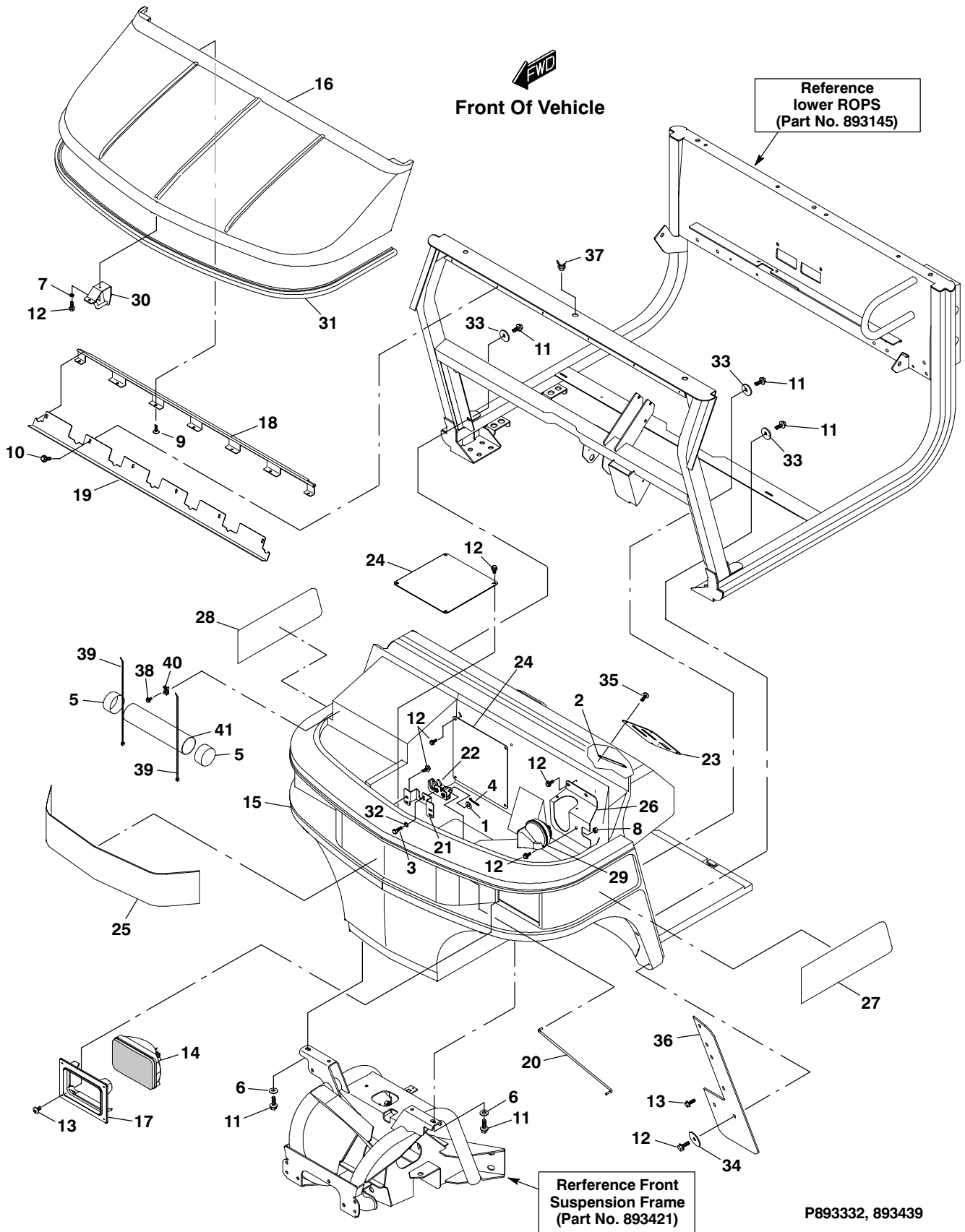
Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	306328	Pin, cotter, .09 x .75	1	19	845038	•Decal, Operation	1
2	308090	Washer, 1/4	1	20	893541	Handhold (right side)	1
3	450452	Nut, M6-1.00 (G10.9)	4	21	894232	Cover, left	1
4	450453	Nut, M8-1.25 (G10.9)	2	22	2700796	Panel, console w/decals (turf)	1
5	450454	Nut, M10-1.50 (G10.9)	5	*	822819	•Decal, Warning, Park Brake	1
6	800026	Screw, 1/4-20 x 3/4	7	*	844177	•Decal, auxillary transmission	1
7	450541	Screw, M6-1.00 x 16	18	*	844179	•Decal, hydraulic controls	1
8	452388	Screw, M8-1.25 x 20 (8.8)	2	(22)	2700797	Panel, console (EC vehicles)	1
9	452398	Screw, M10-1.50 x 20	5	*	845185	•Decal, Warning, Park Brake (EC)	1
10	523085	Bracket	1	*	844177	•Decal, auxillary transmission	1
11	816401	Spring, torsion	1	*	844179	•Decal, hydraulic controls	1
12	830784	Pin, clevis, .25 x 1.88	1	23	800934	Screw, M6-1.00 x 16 (G10.9)	2
13	841789	Catch, engine cover latch	1	24	548175	Washer, 1/4 x 1 1/4 dia.	1
14	841804	Insulation, engine cover	3	25	841813	Cable, choke (Suzuki 970)	1
15	842030	Mount, backrest	2	26	33410-85010	Coil, ignition (Suzuki 970)	1
16	893321	Seat, base assembly	2	27 ♦	840436	Lock, handle	1
17	894822	Seat, back assembly	2	28 ♦	309488	Washer	2
18	2700789	Cover, engine w/decals	1	29	33410-50F20	Coil, ignition (Suzuki K6A)	1

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.

\* Not Illustrated.

♦ Although Item No's. 27 & 28 (handle lock and washers) are used on EC Models, they may be obtained for use on any of the models listed above.

# BODY, HOOD and HEADLIGHTS





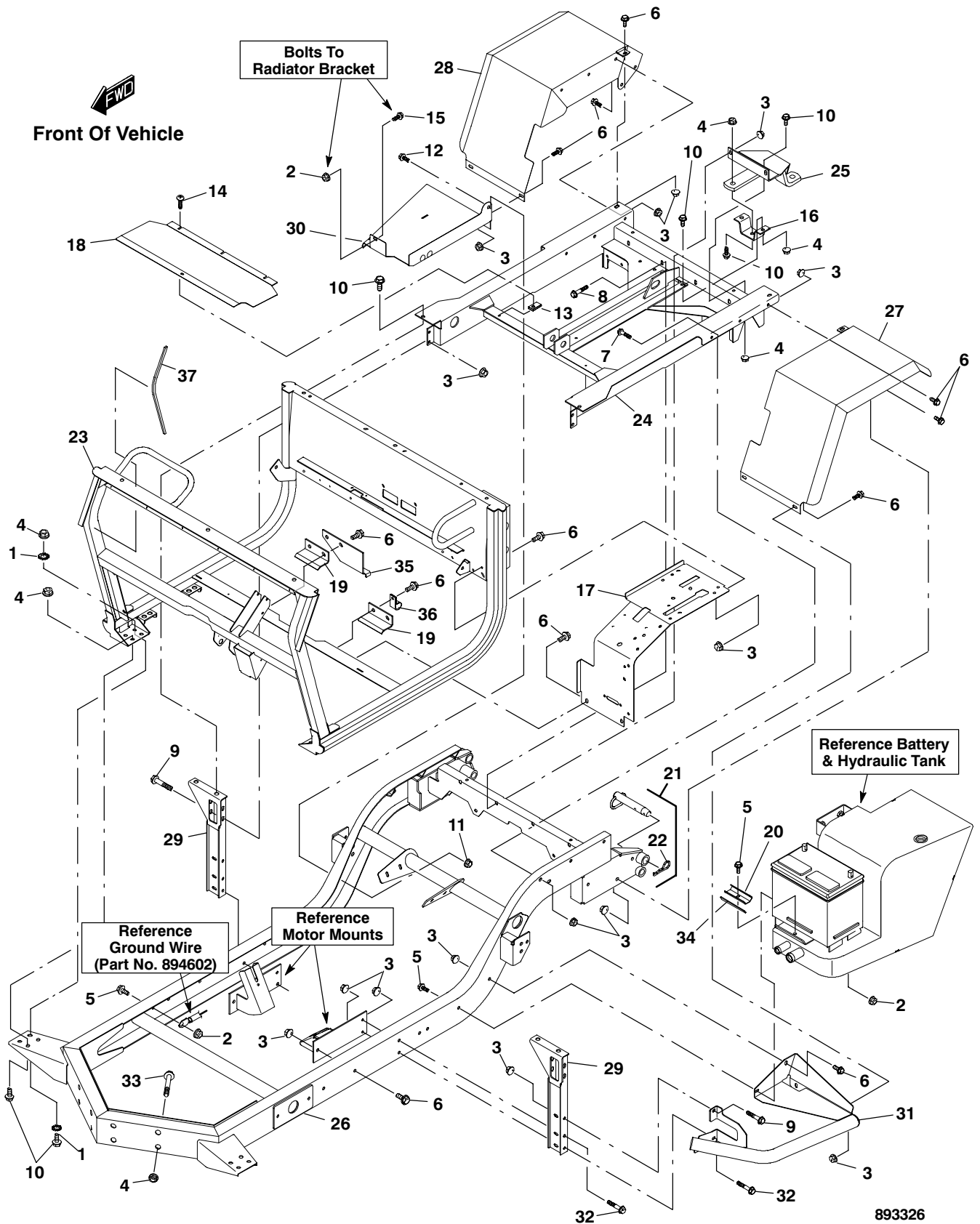
## BODY, HOOD and HEADLIGHTS

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	303952	Washer, #10	1	21	841753	Bracket, hood latch	1
2	894743	Nut ay., double 1/4-20	2	22	841787	Latch, hood	1
3	306419	Screw, 1/4-20 x 1/2	2	23	841264	Panel, dash (left)	1
4	306463	Pin, cotter	1	*	844116	Decal, left dash panel, turf	1
5	38061A	Cap, vinyl	2	24	841913	Plate, access	2
6	450400	Washer, M8	2	25	74764	Decal, CUSHMAN	1
7	450410	Lockwasher, M6	2	26	844167	Bracket, horn/brake reservoir	1
8	450452	Nut, M6-1.00	1	27	74792	Decal, turf-truckster (left)	1
9	450541	Screw, M6-1.00 x 16 (RPH)	7	28	74766	Decal, turf-truckster (right)	1
10	452695	Screw, M6-1.00 x 20, taptite	6	29	886090	Horn	1
11	800930	Screw, M8-1.25 x 16 (8.8)	6	30	894030	Striker, hood	1
12	800934	Screw, M6-1.00 x 16 (8.8)	25	31	844669	Seal, weather	As Req'd.
13	800943	Screw, tap, #10-14	10	32	306488	Lockwasher, 1/4 shakeproof	2
14	837303	Headlight, rectangular	2	33	548159	Washer, 5/16 (1 1/4" diameter)	4
15	2700792	Clip, front	1	34	548175	Washer, 1/4 (1 1/4" diameter)	8
*	821071	•Decal, notice not motor vehicle	1	35	800582	Screw, 1/4-20 x 3/4	4
*	840901	•Decal, Warning read ops. manual	1	36	844049	Flap, mud	2
16	843854	Hood, turf (green)	1	37	844293	Plug	3
17	841428	Bezel, headlamp	2	38	800344	Screw, tapping, #10 type AB	2
18	841477	Hinge, hood	1	39	823549	Tie, cable, 15.5" (394 mm)	2
19	841637	Angle, front clip mount	1	40	840508	Mount, cable tie	2
20	841715	Rod, hood release	1	41	38541	Tube, document	1

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.

\* Not Illustrated.

# FRAME



893326

## FRAME

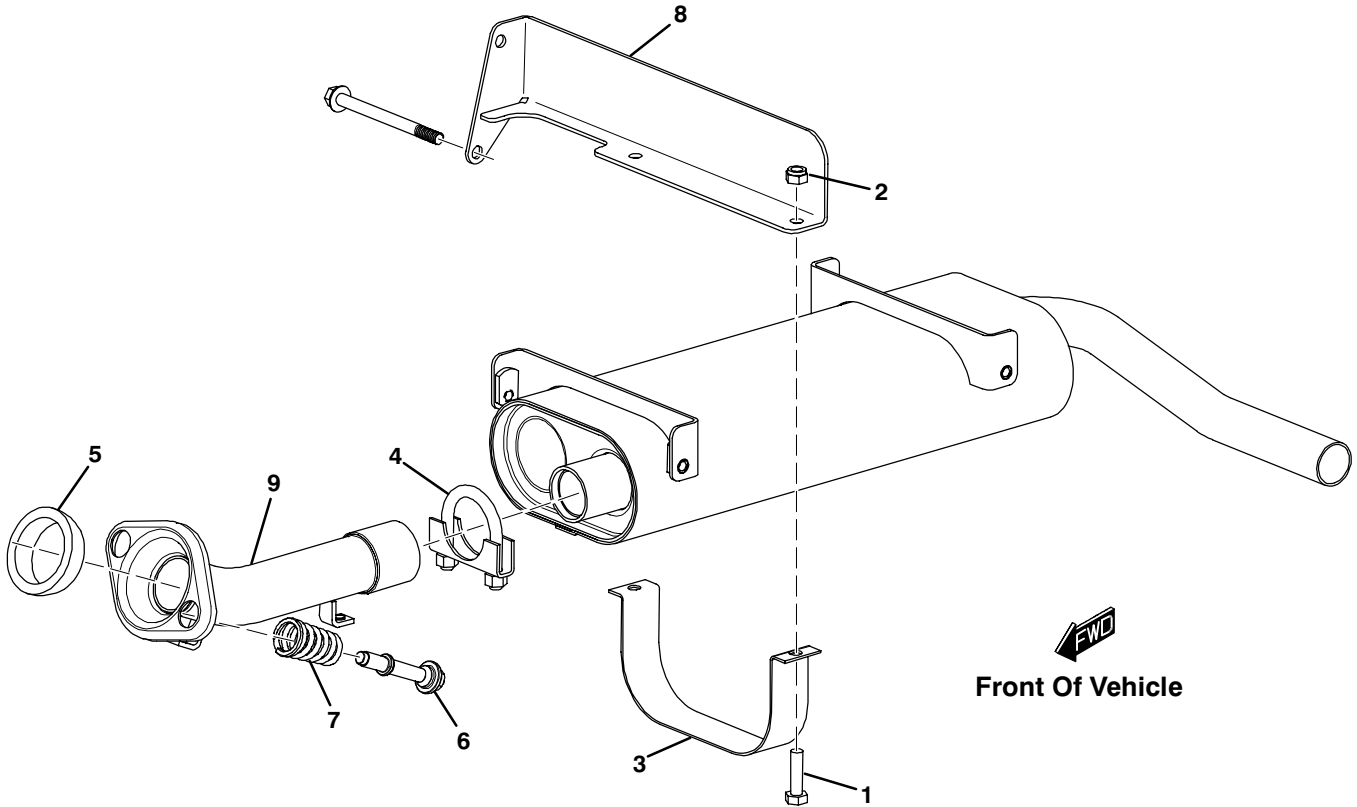
Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	309067	Lockwasher, 1/2 shakeproof	2	18	841805	Panel, access	1
2	450453	Nut, M8-1.25 (G10.9)	3	19	842870	Angle, support	2
3	450454	Nut, M10-1.50 (G10.9)	40	20	844601	Bracket, battery clamp	1
4	450455	Nut, M12-1.75 (G10.9)	21	21	882971	Pin, disconnect	2
5	452389	Screw, M8-1.25 x 25 (8.8)	3	22	809265	•Pin, hair 25/32 x 2 11/16	1
6	452398	Screw, M10-1.50 x 20 (8.8)	27	23	893145	ROPS, lower	1
7	452402	Screw, M10-1.50 x 50 (8.8)	6	24	893199.7	Platform, turf	1
8	452403	Screw, M10-1.50 x 60 (8.8)	4	<b>also</b>	893199G	Platform, turf (galvanized)	1
9	452405	Screw, M10-1.50 x 80 (8.8)	5	25	893220	Drawbar, turf	1
10	452410	Screw, M12-1.75 x 30 (8.8)	17	26	893235	Frame, main	1
11	548911	Nut, 5/16-18	1	<b>also</b>	893235G	Frame, main (galv.)	1
12	800177	Screw, 5/16-18 x 3/4	1	27	893487	Fender (left)	1
13	800279	Nut, speed, 1/4-20	4	28	893488	Fender (right)	1
14	800582	Screw, 1/4-20 x 3/4	4	29	893525	Support, platform	2
15	800930	Screw, M8-1.25 x 16 (8.8)	1	30	893527	Support, fuel tank	1
16	841258	Bracket, drawbar	1	31	894711	Guard, hydraulic tank	1
17	2700796	Panel, console, (turf)	1	32	452406	Screw, M10-1.50 x 90 (8.8)	4
*	822819	•Decal, Warning Park Brake	1	33	452415	Screw, M12-1.75 x 80 (8.8)	8
*	844177	•Decal, auxillary transmission	1	34 ♦	844729	Spacer, battery hold-down	1
*	844179	•Decal, hydraulic controls	1	35	844647	Angle, hold-down	1
(17)	2700797	Panel, console, (turf)	1	36	810437	Clamp, tube (Suzuki 970)	1
*	845185	•Decal, Warning Park Brake (EC)	1	37	828382	Seal, foam	As Req'd.
*	844177	•Decal, auxillary transmission	1				
*	844177	•Decal, auxillary transmission	1				

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.

\* Not Illustrated.

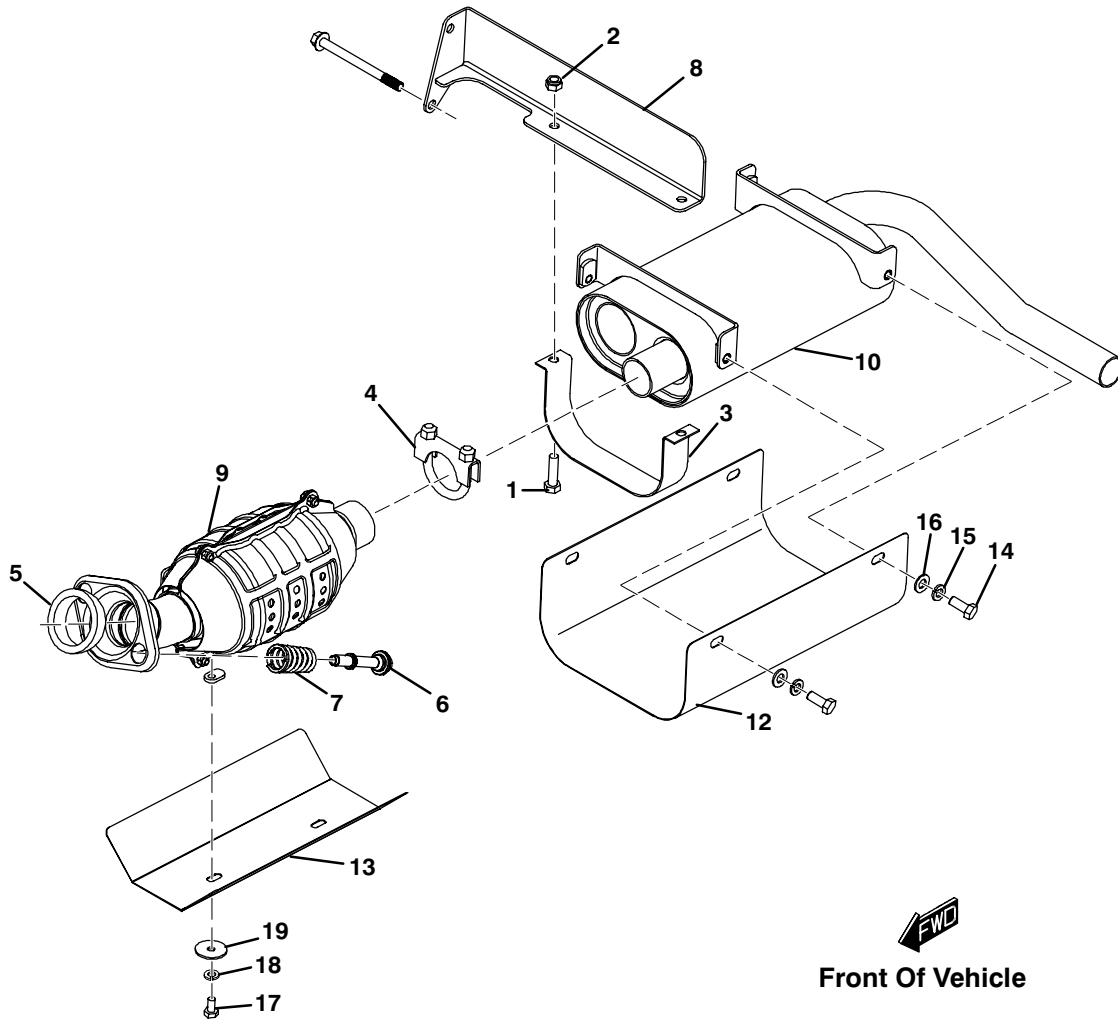
♦ Item No. 34 (Battery Hold-down Spacer, Part No. 844729) may not be used on all vehicles. If the battery clamp cannot be adjusted to properly secure the battery, this spacer will be required.

## EXHAUST SYSTEM (SUZUKI K6A)



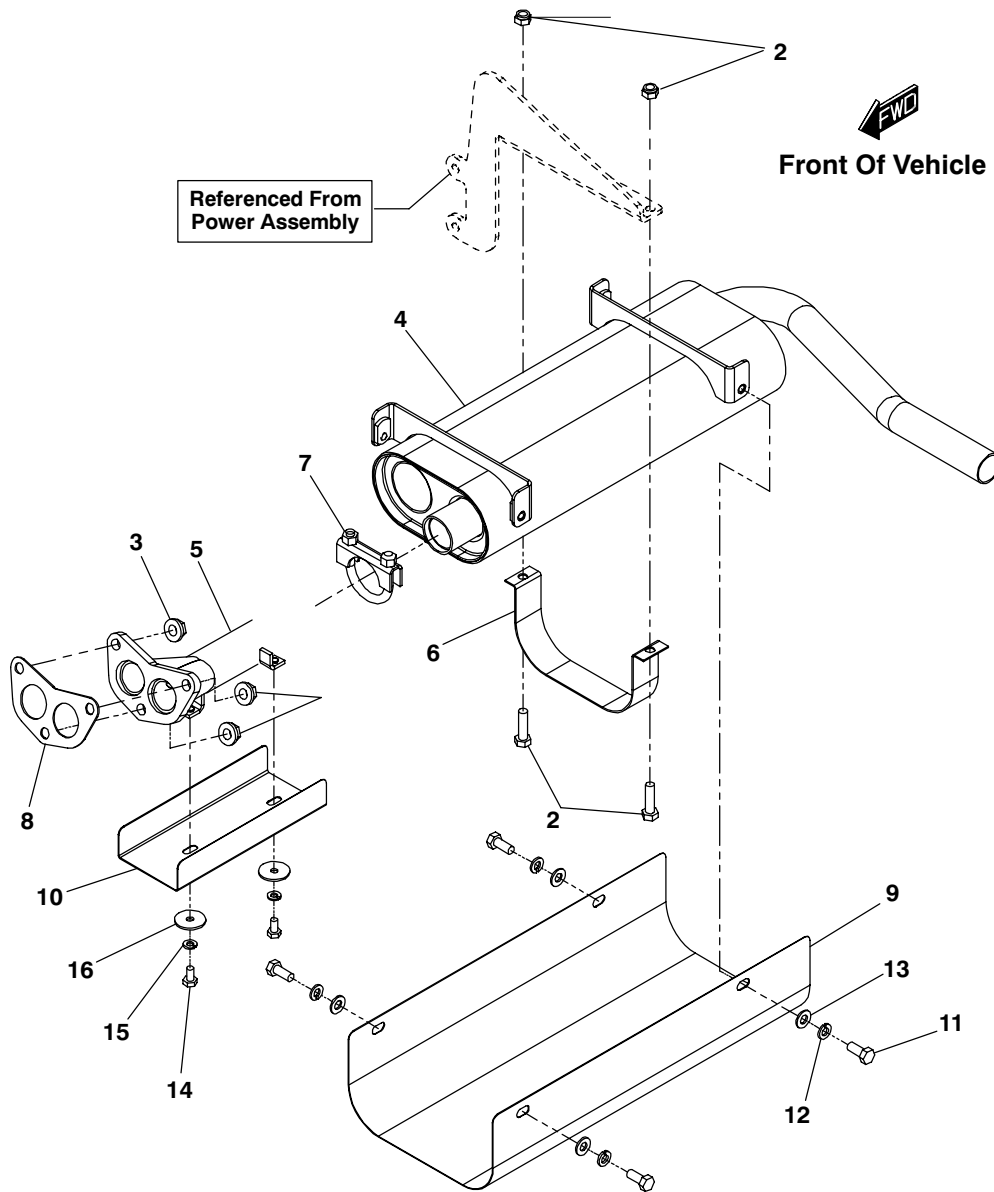
Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	450193	Screw, M8-1.25 x 30	2	6	2700144	Bolt, muffler flange	2
2	450378	Locknut, M8-1.25 staytite	2	7	2700145	Spring, muffler flange	2
3	838295	Strap, muffler hanger	1	8	4114221.8	Bracket, muffler	1
4	841982	Clamp, exhaust tube (1 1/2")	1	9	36074-G01	Tube assy, muffler inlet	1
5	2700143	Ring, muffler flange	1	10	4119866.8	Muffler assy	1

## CALIFORNIA EXHAUST SYSTEM (CATALYTIC CONVERTER) (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	450193	Screw, M8-1.25 x 30	2	11	841982	Decal, carb. Suzuki K6	1
2	450378	Locknut, M8-1.25 staytite	2	12	412517.8	Shield, muffler	1
3	8388295.8	Strap, muffler hanger	1	13	4121525.8	Shield, catalytic converter	1
4	841982	Clamp, exhaust tube (1 1/2")	1	14	306450	Screw, 5/16 - 18 X 3/4	4
5	270143	Ring, muffler flange	1	15	306325	Lockwasher, 5/16	4
6	2700144	Bolt, muffler flange	2	16	103867	Washer, 5/16	4
7	2700145	Spring, muffler flange0	1	17	306419	Screw, 1/4	2
8	41124517.8	Bracket, muffler	1	18	306396	Lockwasher, 1/4	2
9	36072-G01	Converter AY, catalytic	1	19	815680	Washer. special	2
10	4116284.8	Muffler assembly	1				

## EXHAUST SYSTEM (SUZUKI 970)

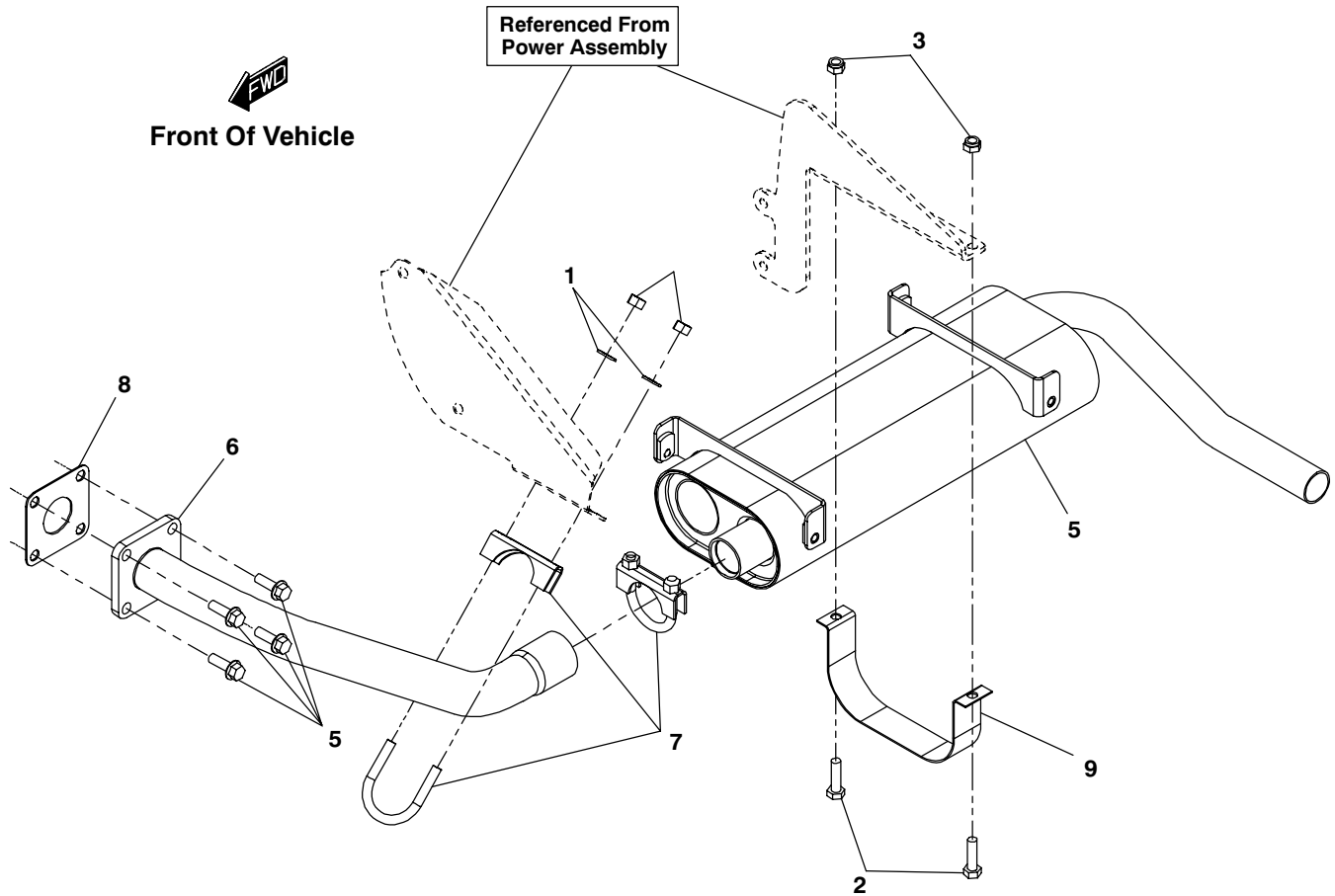


**NOTE: TAILPIPE TO BE 0.5" FROM FENDER.  
TAILPIPE OUTLET TO BE PARALLEL TO GROUND.**

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	450193	Screw, M8-1.25 x 30	2	9	4119867.8	Shield, muffler	1
2	450378	Locknut, M8-1.25, Staytite	2	10	4119869.8	Shield, inlet tube	1
3	800821	Nut, M10-1.25	3	11	306450	Screw, 5/16-18 x 3/4	4
4	4119866.8	Muffler	1	12	306325	Lockwasher, 5/16	4
5	4119868.8	Tube, inlet	1	13	103867	Washer, 5/16	4
6	838295.8	Strap, muffler hanger	1	14	306419	Screw, 1/4-20 x 1/2	2
7	841982	Clamp, exhaust tube (1 1/2")	1	15	306396	Lockwasher, 1/4	2
8	843539	Gasket, exhaust, 5/16	1	16	815680	Washer, special	2

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

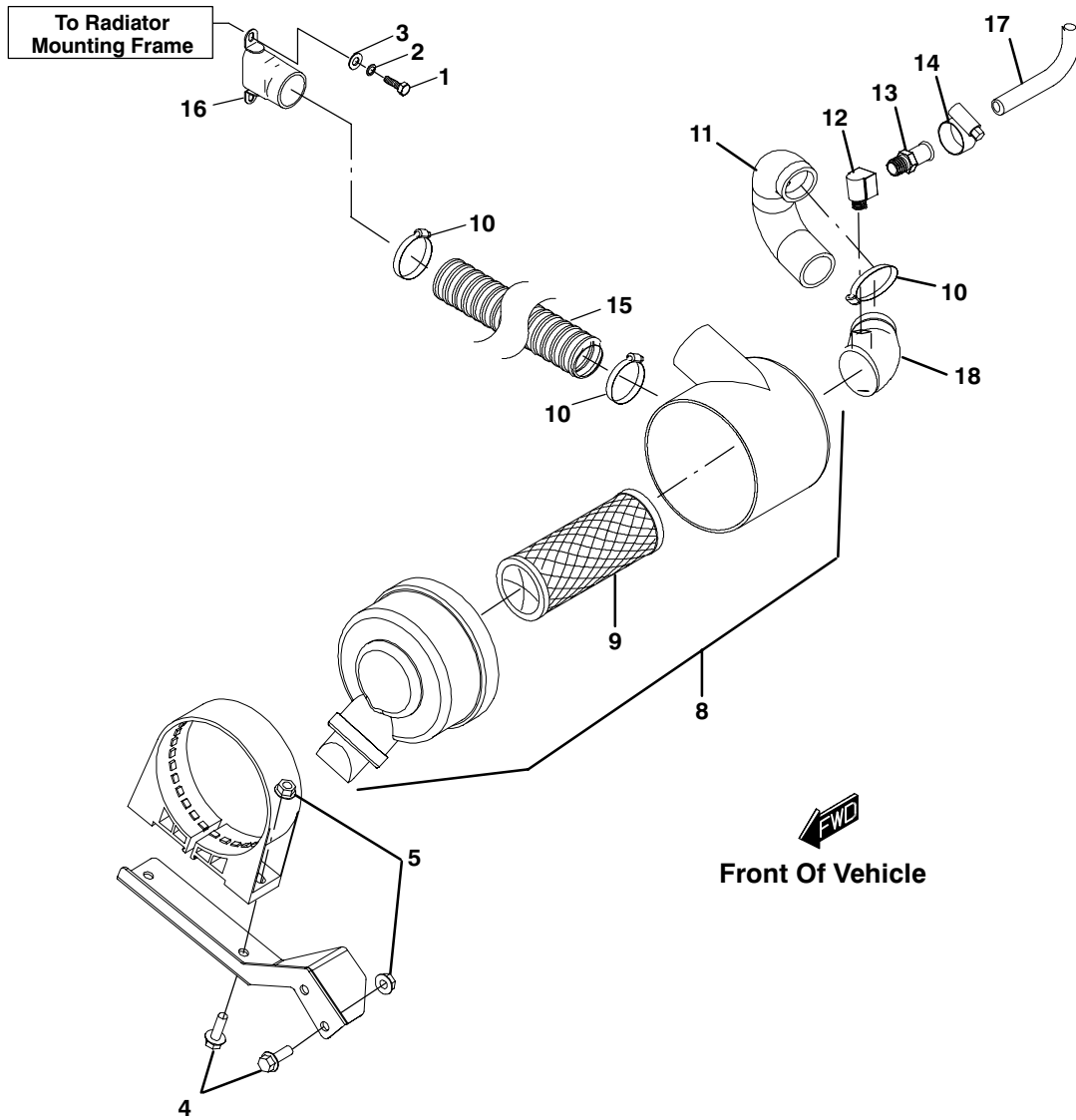
## EXHAUST SYSTEM (DIESEL)



NOTE: TAILPIPE TO BE 0.5" FROM FENDER.  
TAILPIPE OUTLET TO BE PARALLEL TO GROUND.

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	103867	Washer, 5/16	2	6	2703800.8	Tube, exhaust inlet	1
2	450193	Screw, M8-1.25 staytite	2	7	841982	Clamp, tubing	2
3	450378	Locknut, M8-1.25, staytite	2	8	842234	Gasket, exhaust	1
4	452389	Screw, M8-1.25 x 25	4	9	838295.8	Strap, muffler hanger	1
5	4119866.8	Muffler ay	1				

## AIR CLEANER, BRACKET and FILTER (SUZUKI K6A)

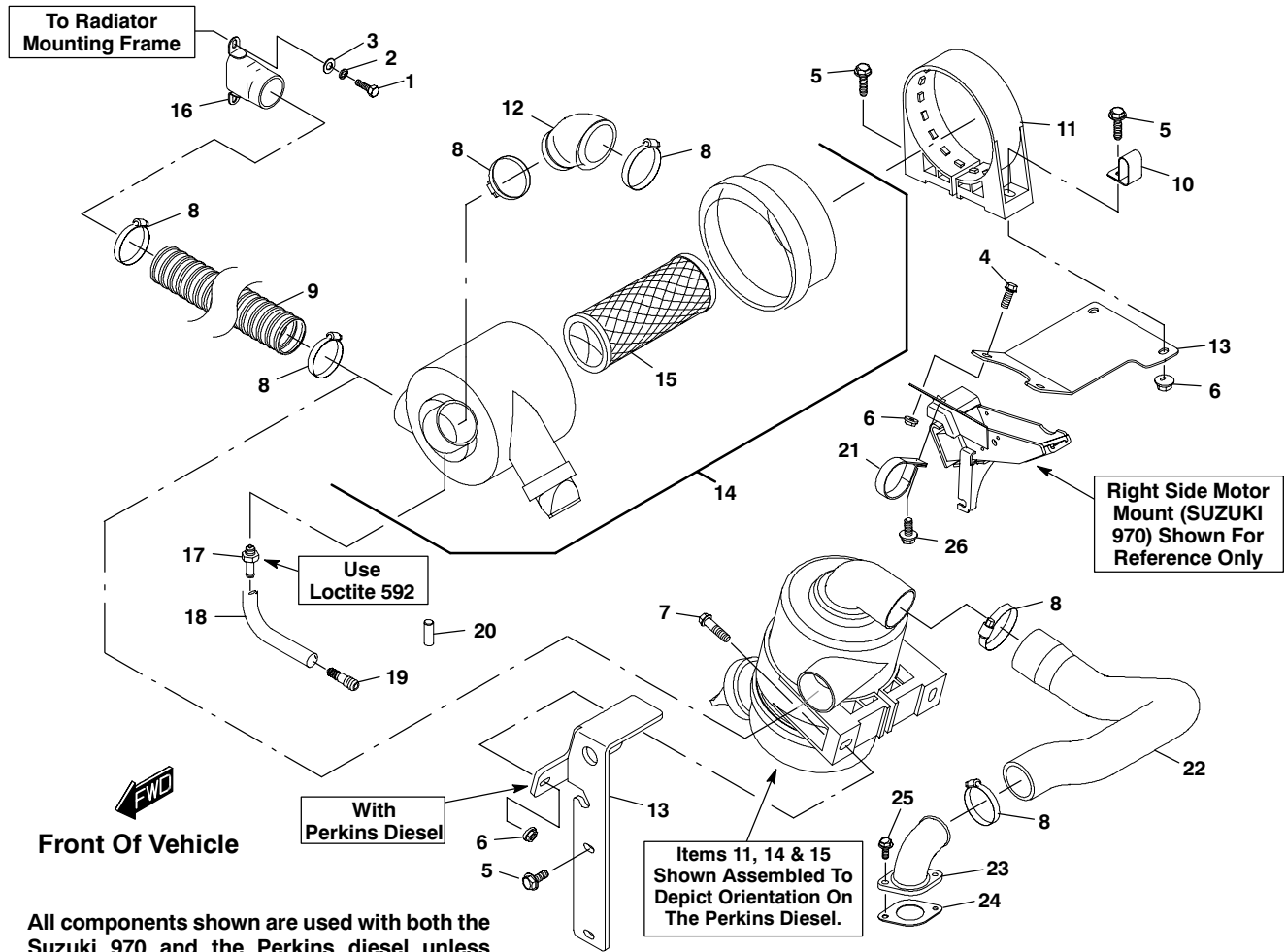


Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	300646	Screw, 1/4-20 x 3/4	2	10	825358	Clamp, worm drive	4
2	306396	Lockwasher, 1/4	2	11	4115401	Hose, air cleaner	1
3	308090	Washer, 1/4	2	12	4118423	Elbow, street 1/4	1
4	452389	Screw, M8-1.25 x 25 (8.8)	5	13	4118422	Hose, barb-brass 1/4	1
5	450453	Nut, verbus rib M8	5	14	832033	Clamp, worm drive	2
6	4115792.7	Bracket, air cleaner	1	15	825724	Hose, air cleaner	1
7	842915	Bracket, filter	1	16	841230	Connector, 3/8T x 1/8MP	1
8	4118027	Filter assy, air	1	17	832246	Hose, 3/8 heater	As Req'd.
9	840352	•Element, air cleaner	1	18	843666	Hose, air inake	1

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY



## AIR CLEANER, BRACKET and FILTER (SUZUKI 970 and DIESEL)

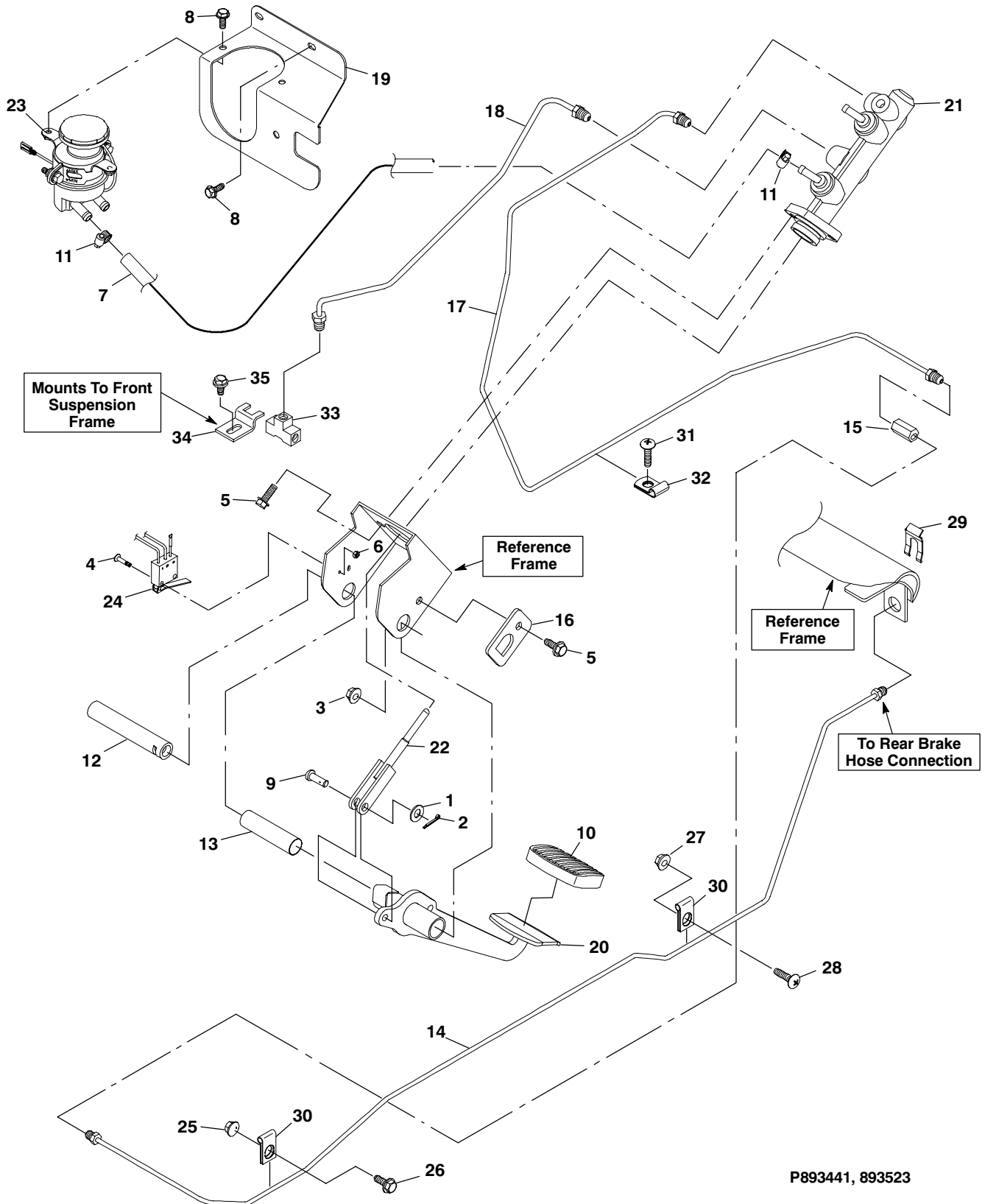


893444, 893594, 894197, 894198

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	300646	Screw, 1/4-20 x 3/4	2	(13)	844311	Bracket, air cleaner (Perkins)	1
2	306396	Lockwasher, 1/4	2	14	893182	Filter complete, air	1
3	308090	Washer, 1/4	2	15	840352	•Element, air cleaner	1
4	452388	Screw, M8-1.25 x 20 (8.8)	2	16	888549	Connector, hose (air cleaner)	1
5	452389	Screw, M8-1.25 x 25 (8.8)	2	17	841230	Connector (Suzuki 970)	1
6	450453	Nut, M8-1.25 (8.8) (Perkins)	2	18	832246	Hose, 3/8" heater (Suzuki 970)	As Req'd.
(6)	450453	Nut, M8-1.25 (8.8) (Suzuki 970)	4	19	843831	Connector, hose (Suzuki 970)	1
7	452390	Screw, M8-1.25 x 30 (8.8) (Perkins)	2	20	842997	Cap, 7/64 i.d. x 3/4 (Suzuki 970)	1
8	825358	Clamp, worm-drive	4	21	825884	Clamp, tube/wire (Suzuki 970)	1
9	825724	Hose, air cleaner	1	22	844313	Hose, intake (Perkins)	1
10	817320	Clamp	1	23	841943	Inlet, air (Perkins)	1
11	842915	Bracket, air filter	1	24	842235	Gasket, air inlet (Perkins)	1
12	843666	Hose, air intake	1	25	452378	Screw, M6-1.00 x 20 (Perkins)	1
13	843715	Bracket, air cleaner (Suzuki 970)	1	26	800934	Screw, M6-1.00 x 16 (970)	1

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

# HYDRAULIC BRAKE LINES



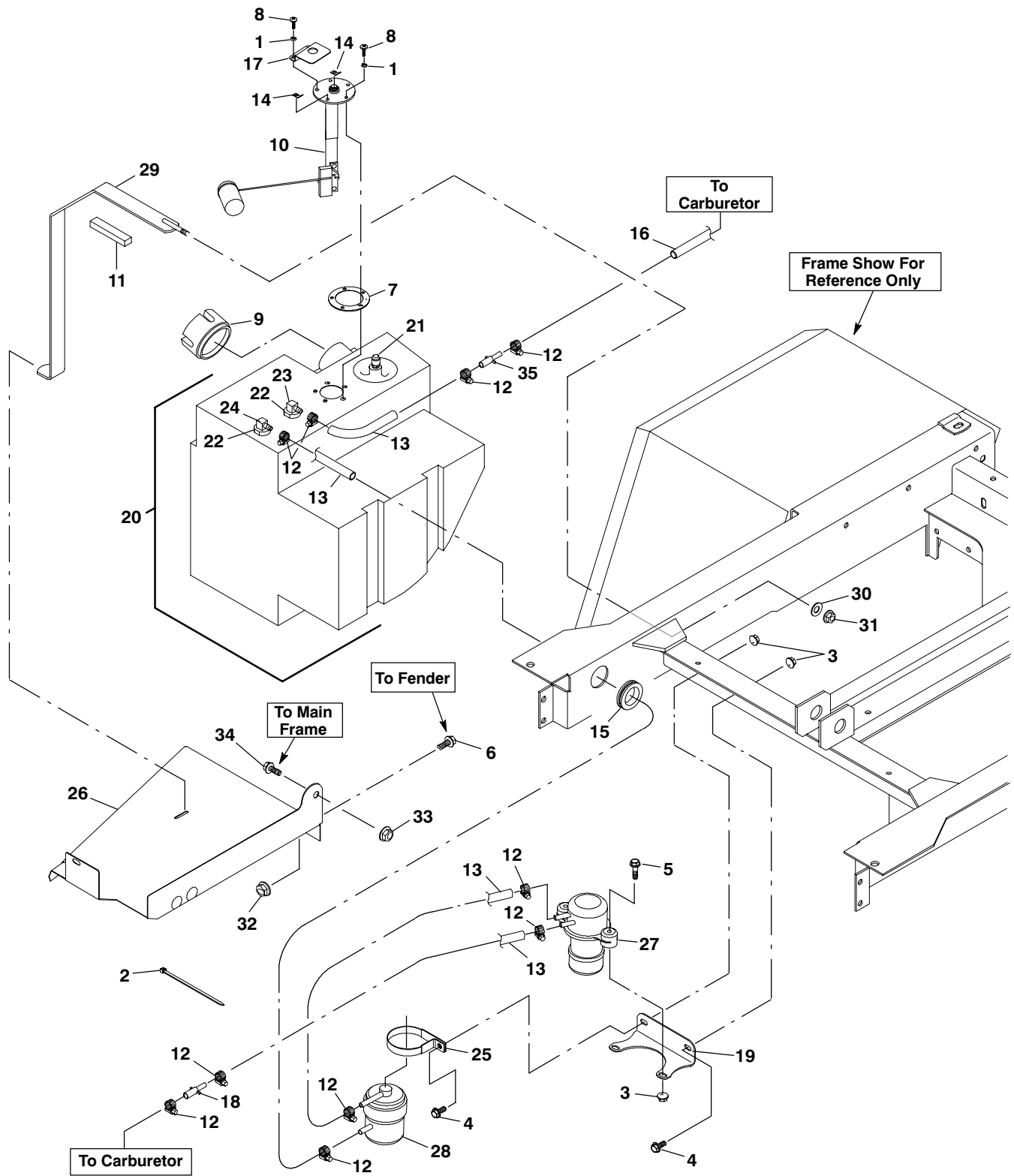
P893441, 893523

## HYDRAULIC BRAKE LINES

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	103867	Washer, 5/16	1	19	844167	Bracket, reservoir mounting	1
2	306328	Pin, cotter, 3/32 x 3/4	1	20	892921	Lever, brake	1
3	450453	Nut, M8-1.25 (G10.9)	1	21	895113	Cylinder, brake (dual)	1
4	450510	Screw, M3-.50 x 20 (G10.9)	2	22	894167	Rod, brake	1
5	452388	Screw, M8-1.25 x 20 (8.8)	3	23	894456	Reservoir, brake fluid	1
6	452424	Nut, M3-.50	2	24	890808	Switch, micro	1
7 ▼	845380	Hose, 5/16" brake	As Req'd.	25	450454	Nut, M10-1.50 (G10.9)	1
8	800934	Screw, M6-1.00 x16 (8.8)	4	26	452398	Screw, M10-1.50 x 20 (8.8)	1
9	806714	Pin, clevis 5/16 x 15/16	1	27	548910	Nut, 1/4-20	1
10	810152	Cover, brake pedal	1	28	800026	Screw, 1/4-20 x 3/4	1
11	825624	Clamp, hose	4	29	809137	Clip	1
12	840725	Pin, brake pivot	1	30	810435	Clamp	2
13	840726	Bearing, brake pivot	1	31	800943	Screw, tap #10-14 x 5/8	1
14	842051	Tube, brake line rear	1	32	812445	Clamp, tube/wire	1
15	842103	Union, brake fitting (metric)	1	33	841842	Tee, M10-1.00	1
16	842935	Tab, locking	1	34	843418	Clamp, tee	1
17	843022	Tube, rear brake	1	35	452692	Screw, tap M6-1.00 x 12	1
18	843021	Tube, front brake	1				

▼ The brake hose (Part No. 845380) is serviced as a 6' (1,829 mm) length.

# FUEL SYSTEM (SUZUKI K6A and 970)



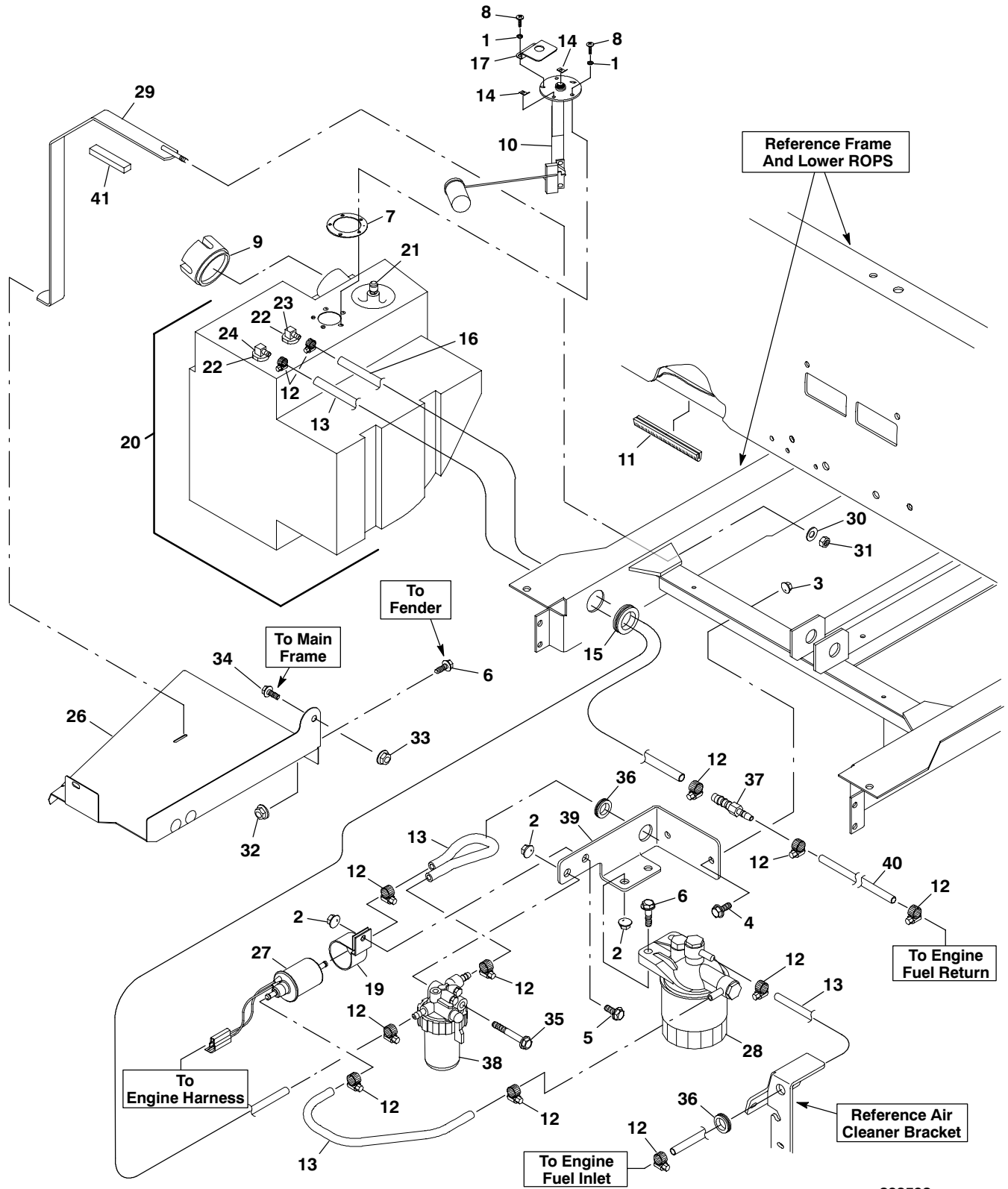
894475

## FUEL SYSTEM (SUZUKI K6A and 970)

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	120052	Lockwasher, #10 . . . . .	5	19	841769	Bracket, reservoir mounting . . . .	1
2	320107	Tie, cable, 7 1/2" (190.5 mm) . . .	2	20	841969	Tank, fuel . . . . .	1
3	450452	Nut, M6-1.00 (G10.9) . . . . .	4	21	836852	•Breather . . . . .	1
4	452378	Screw, M6-1.00 x 20 . . . . .	2	22	84310	•Grommet . . . . .	2
5	452380	Screw, M6-1.00 x 30 (8.8) . . . . .	2	23	843727	•Elbow, 90° . . . . .	1
6	452398	Screw, M10-1.5 x 20 (8.8) . . . . .	2	24	843726	•Tube, fuel pick-up . . . . .	1
7	829954	Gasket . . . . .	1	25	842800	Clamp, filter . . . . .	1
8	800021	Screw, #10-32 x 1/2 . . . . .	5	26	893527	Support, fuel tank . . . . .	1
9	843343	Cap fuel (unvented) . . . . .	1	27	15100-53F03	Pump, fuel . . . . .	1
10	843298	Sender, fuel . . . . .	1	28	15410-50F00	Filter, fuel . . . . .	1
11	833851	Seal, foam . . . . .	As Req'd.	29	893555	Strap, fuel tank . . . . .	1
12	825624	Clamp, hose . . . . .	10	30	103867	Washer, 5/16 . . . . .	1
13	826590	Hose, fuel, 5/16 i.d. . . . .	As Req'd.	31	800221	Nut, crownlock, 5/16-24 . . . . .	1
14	829787	Terminal, 45° 1/4 male . . . . .	2	32	450454	Nut, M10-1.50 (10.9) . . . . .	2
15	829997	Grommet . . . . .	1	33	548911	Nut, 5/16-18 . . . . .	1
16	830425	Hose, fuel, 1/4 i.d. . . . .	As Req'd.	34	800177	Screw, 5/16-18 x 3/4 . . . . .	1
17	833953	Cover, fuel sender . . . . .	1	35	845189	Connector, hose . . . . .	1
18	834037	Connector, hose . . . . .	1				

• INDENTED PARTS NAME INDICATE THESE PARTS ARE INCLUDED WITH THE PRECEDING ASSEMBLY

# FUEL SYSTEM (DIESEL)



893598

## FUEL SYSTEM (DIESEL)

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	120052	Lockwasher, #10	5	22	84310	•Grommet	2
2	450453	Nut, M8-1.25 (G10.9)	4	23	843727	•Elbow, 90°	1
3	450452	Nut, M6-1.00 (G10.9)	2	24	843726	•Tube, fuel pick-up	1
4	452378	Screw, M6-1.00 x 20	2	25	842800	Clamp, filter	1
5	452389	Screw, M8-1.25 x 25 (8.8)	1	26	893527	Support, fuel tank	1
6	452390	Screw, M8-1.25 x 30 (8.8)	2	27	894638	Pump, fuel	1
7	829954	Gasket	1	28	2208175	Filter, fuel	1
8	800021	Screw, #10-32 x 1/2	5	29	893555	Strap, fuel tank	1
9	843343	Cap fuel (unvented)	1	30	103867	Washer, 5/16	1
10	843298	Sender, fuel	1	31	800697	Nut, crownlock, 5/16-18	1
11	821893	Trim, push-on	As Req'd.	32	450454	Nut, M10-1.50 (10.9)	2
12	825624	Clamp, hose	12	33	548911	Nut, 5/16-18	1
13	826590	Hose, fuel, 5/16 i.d.	As Req'd.	34	800177	Screw, 5/16-18 x 3/4	1
14	829787	Terminal, 45° 1/4 male	2	35	452394	Screw, M8-1.25 x 70 (8.8)	1
15	829997	Grommet	1	36	809231	Grommet	2
16	830425	Hose, fuel, 1/4 i.d.	As Req'd.	37	834036	Connector, hose	1
17	833953	Cover, fuel sender	1	38	130306180	Pre-filter, fuel	1
18	834037	Connector, hose	2	39	843534	Bracket, fuel filter	1
19	838154	Bracket, fuel pump mounting	1	40	831039	Hose, fuel 5/32 i.d.	As Req'd.
20	841969	Tank, fuel	1	41	833851	Seal, foam	As Req'd.
21	836852	•Breather	1				

• INDENTED PARTS NAME INDICATE THESE PARTS ARE INCLUDED WITH THE PRECEDING ASSEMBLY

Certain engine parts will need to be ordered directly from Perkins. Ref No. 38, Fuel Pre-filter, shows the Perkin's part number and is one of the parts which would be obtained from Perkin's.

When ordering from Perkin's be sure to include the Engine Model and Spec No's.

The model and specification numbers for the Perkins engine are as follows:

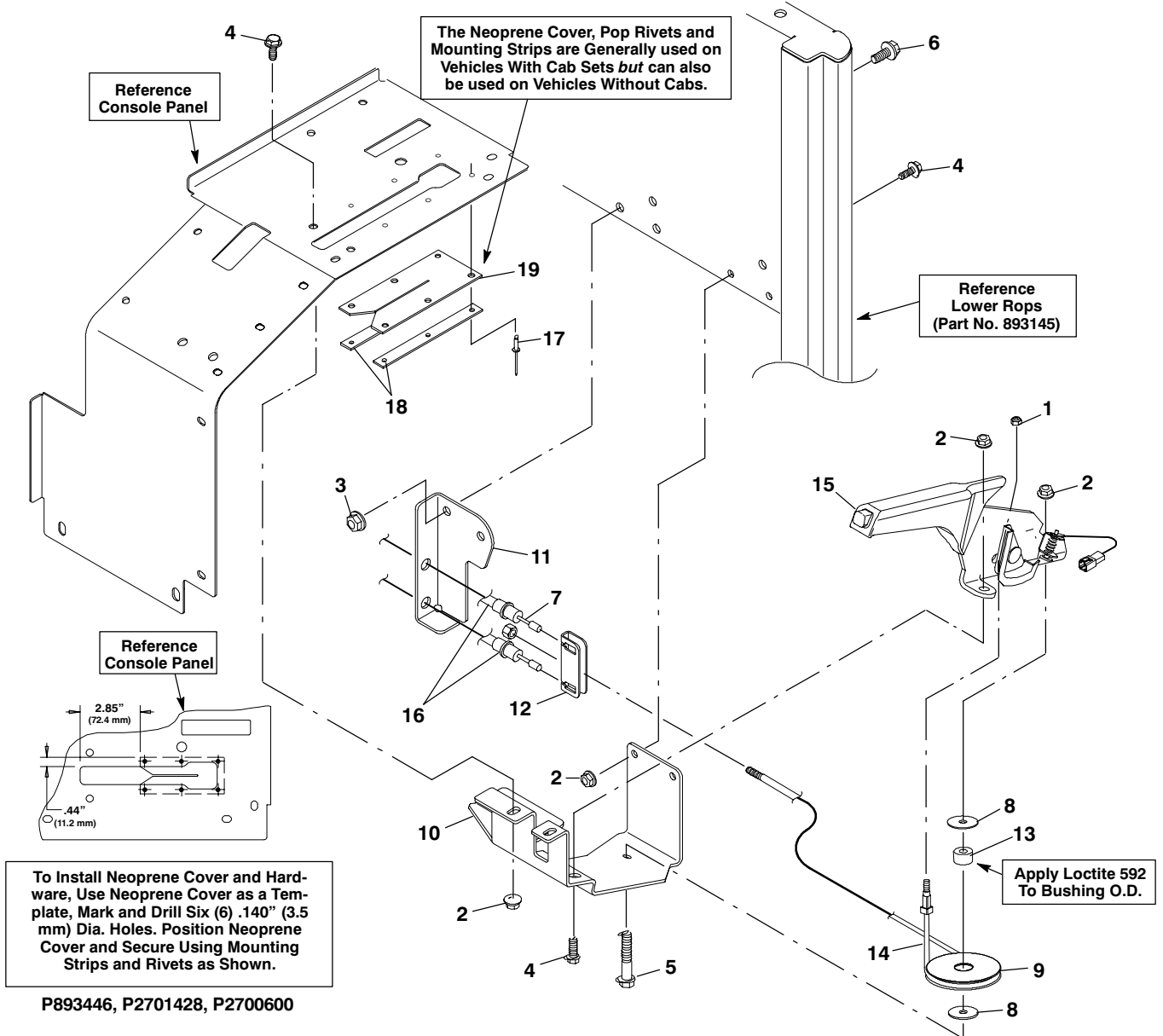
**Model 103.10 - Spec. KD70377.**

To locate the Perkin's Dealer nearest to you, please call: **1-888-737-5364**

The parts listed below can be ordered from the Cushman Parts Department.

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	842553	Filter, oil	1	3	842235	Gasket, inlet	1
2	842555	Gasket, manifold	1	4	2208175	Filter, fuel	1

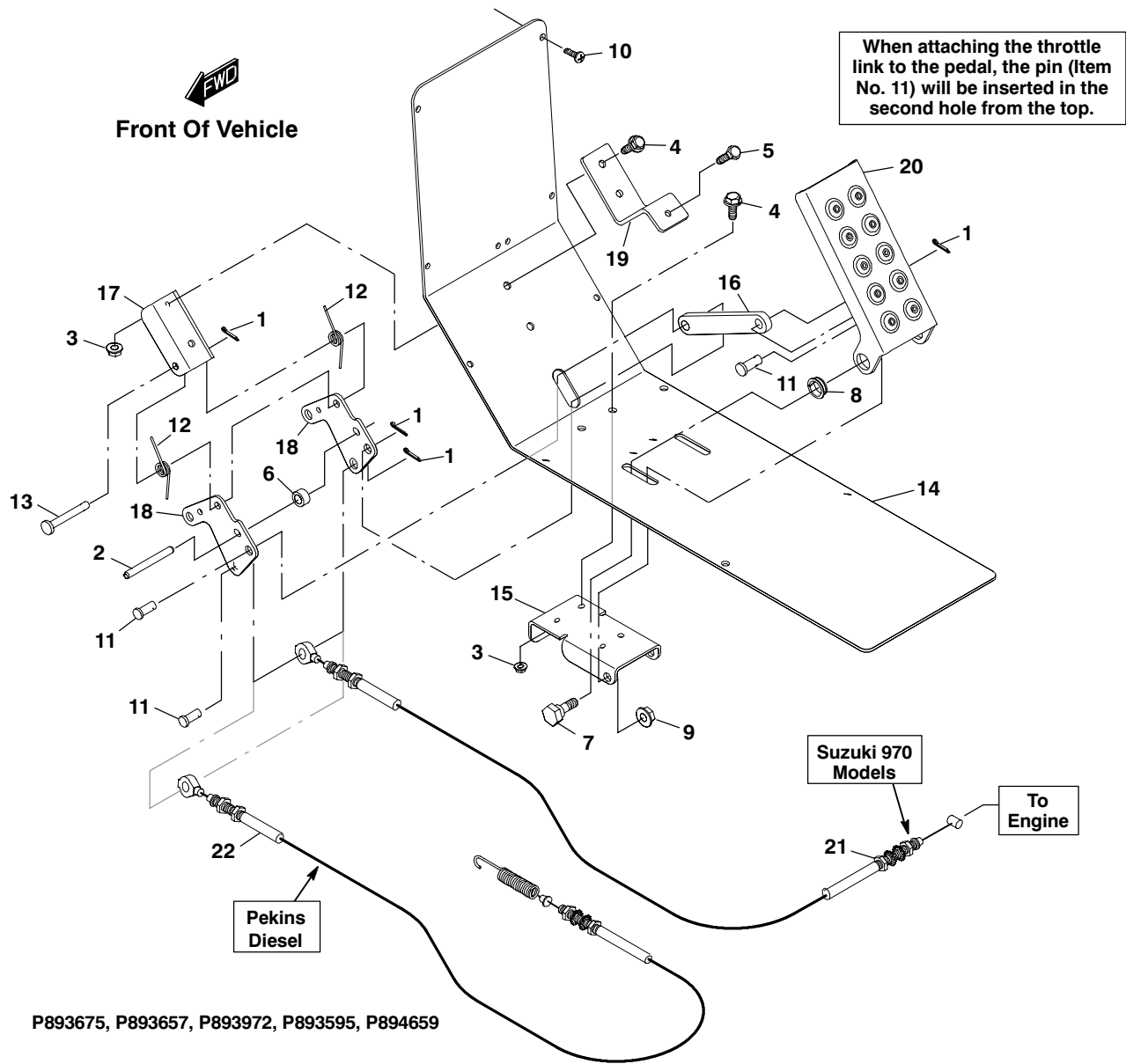
## PARK BRAKE LEVER AND CABLE



Ref. No.	Part No.	Description	No. Req'd	Notes
1	450377	Nut, staytite, M6-1.00	1	
2	450453	Nut, M8-1.25 (G10.9)	6	
3	450454	Nut, M10-1.50 (10.9)	2	
4	452388	Screw, M8-1.25 x 20 (G8.8)	5	
5	452391	Screw, M8-1.25 x 40 (8.8)	1	
6	452398	Screw, M10-1.50 x 20 (8.8)	2	
7	800446	Locknut, 5/16-24	1	
8	809152	Washer, 5/16 x 1 3/16	2	
9	827182	Pulley, 3" dia. (76 mm dia.)	1	
10	845134	Bracket, park brake lever	1	
11	843158	Bracket, park brake cable	1	
12	843356	Equalizer, park brake	1	
13	843359	Bushing, park brake	1	
14	845133	Cable, park brake	1	
15	894317	Lever, park brake	1	
16	893583	Cable, park brake (to rear brakes)	2	
17	133741	Rivet, pop (.12 .5 clsd. end)	6	
18	2701335	Mounting, park brake	1	
19	2701336	Cover, parking brake	1	

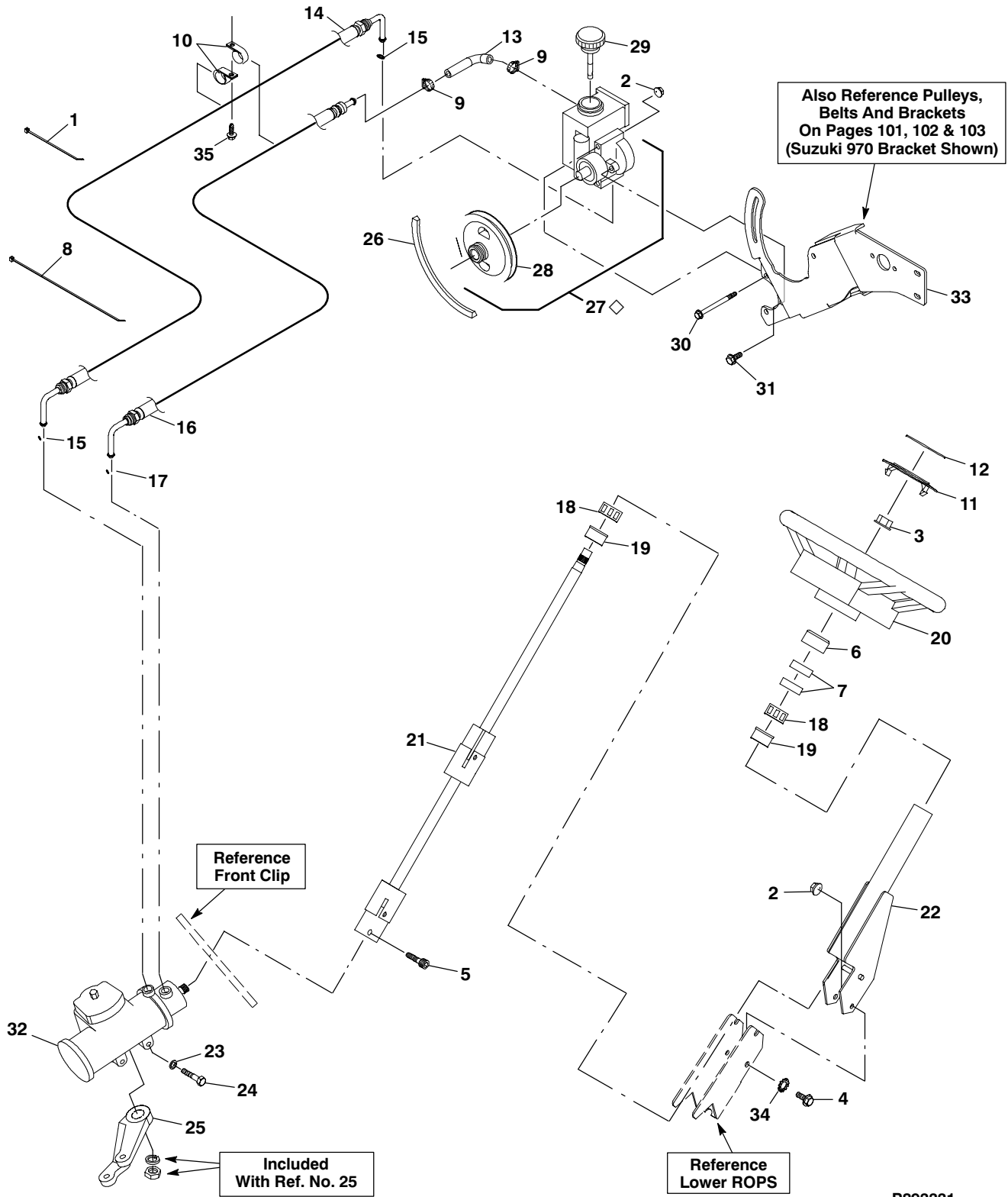


# FOOT THROTTLE and LINKAGE



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	306328	Pin, cotter, 3/32 x 3/4	4	12	844223	Spring, torsion	2
2	844224	Pin, roll 3/16 x 1 3/4"	2	13	830784	Pin, clevis, 1/4 x 1 7/8	1
3	450452	Nut, M6-1.00 (G10.9)	6	14	841663	Panel, floor access	1
4	452378	Screw, M6-1.00 x 20	6	15	843360	Channel, mount	1
5	452695	Screw, M6-1.00 x 20, taptite	1	16	843561	Link, throttle	1
6	515268	Bushing	2	17	843562	Mount, channel	1
7	524633	Screw, shoulder 5/16-18 x 1	2	18	843563	Plate, pivot	2
8	524643	Bearing, split	2	19	843997	Bracket, stop	1
9	548911	Nut, 5/16-18	2	20	894159	Pedal, throttle	1
10	800943	Screw, tap, #10-14 x 5/8	10	21	894540	Cable, throttle (Suzuki Models)	1
11	806714	Pin, clevis, 5/16 x 3/4	3	22	894618	Cable, throttle (Perkins)	1

# STEERING WHEEL, STEERING SHAFT, CONNECTING HOSES POWER STEERING PUMP and STEERING GEAR



P893331

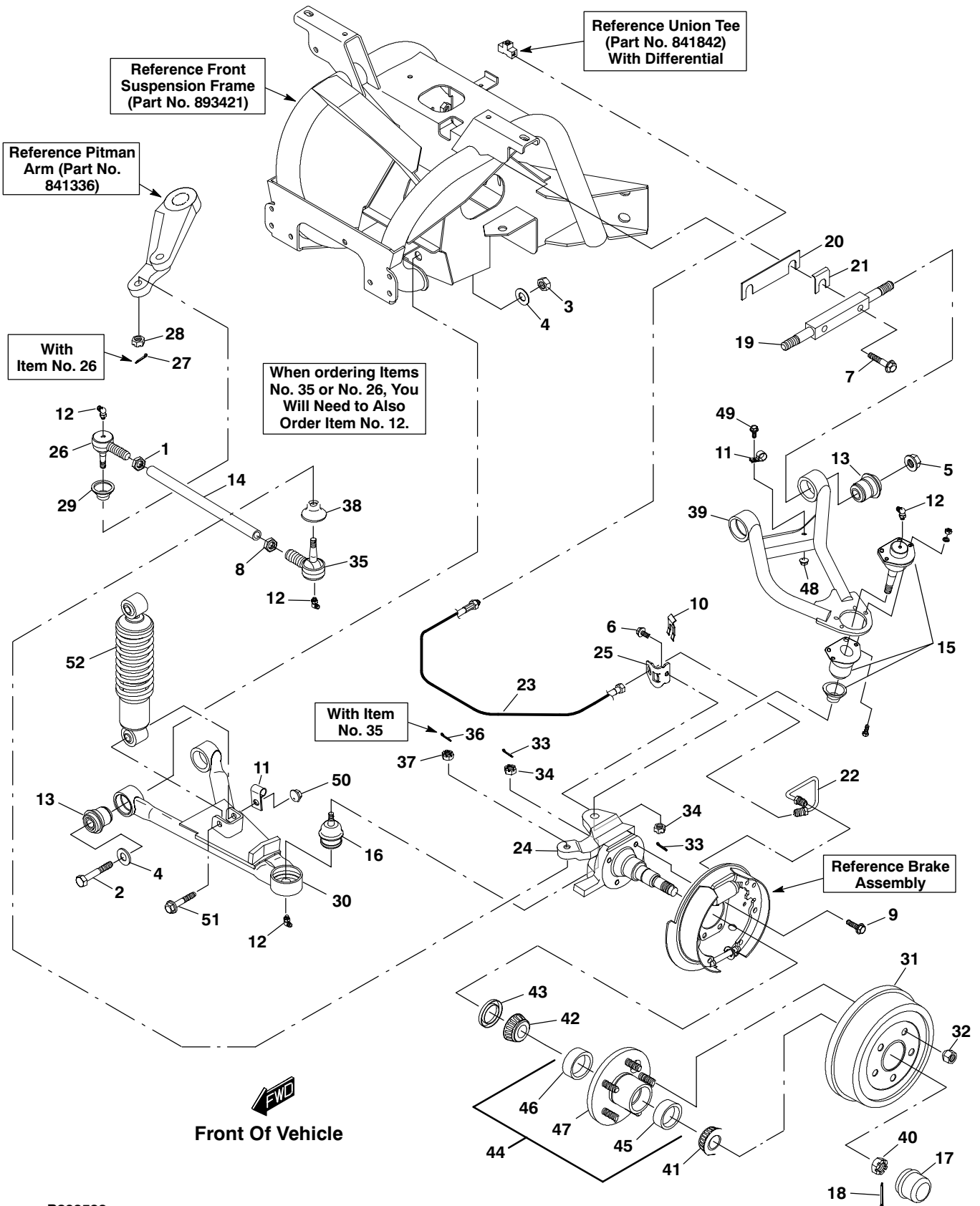
**STEERING WHEEL, STEERING SHAFT, CONNECTING HOSES  
POWER STEERING PUMP and STEERING GEAR**

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	320107	Tie, cable, 7 1/2" (190 mm) . . . . .	3	22	893571	Tube, steering mount . . . . .	1
2	450453	Nut, M8-1.25 (G10.9) . . . . .	4	23	303269	Lockwasher, 7/16 . . . . .	3
3	450457	Nut, M16-2.00 . . . . .	1	24	311392	Screw, 7/16-14 x 2 . . . . .	3
4	800930	Screw, M8-1.25 x 16 (8.8) . . . . .	2	25	841336	Arm, pitman . . . . .	1
5	450739	Screw, socket head M10-1.50 x 30 (8.8) . . . . .	1	26	844301	V-belt, 48" (1219 mm) Perkins . .	1
6	2700453	Cover . . . . .	1	(26)	836854	V-belt, 42" (1067 mm) Suzuki 970	1
7	819923	Collar, foam . . . . .	2	27	◇ 892534	Pump, power steering . . . . .	1
8	823549	Tie, cable, 15 1/2" (394 mm) . . . . .	2	28	839907	•Pulley, steering pump . . . . .	1
9	830930	Clamp . . . . .	2	29	2700573	•Cap, steering pump reservoir .	1
10	809092	Clamp, tube . . . . .	2	30	452394	Screw, M8-1.25 x 70 (8.8) . . . . .	2
11	892486	Cover, steering wheel center . . . . .	1	31	452388	Screw, M8-1.25 x 20 (8.8) . . . . .	4
12	839862	•Decal, steering wheel . . . . .	1	32	841255	Gear, power steering . . . . .	1
13	840222	Hose, 3/8 i.d. x 90° elbow . . . . .	1	33	894362	Bracket, steering pump and alt. mounting (Suzuki 970) . . . . .	1
14	843767	Hose, steering pressure . . . . .	1	(33)	844268	Bracket, steering pump, rear (Perkins Diesel) . . . . .	1
15	111838	•O'-Ring . . . . .	2	also	844272	Mount, engine, right (Perkins Diesel) . . . . .	1
16	843768	Hose, steering return . . . . .	1	34	306799	Lockwasher, 5/16 external, shakeproof . . . . .	2
17	111838	•O'-Ring . . . . .	1	35	800943	Screw, tap, #10-24 x 5/8 . . . . .	1
18	808060	Bearing, needle . . . . .	2				
19	828590	Housing, bearing . . . . .	2				
20	892228	Wheel, steering (w/o horn) . . . . .	1				
21	893344	Shaft, steering . . . . .	1				

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEEDING ASSEMBLY.

◇ Service Parts for the pump are available at automotive centers. Refer to 1991-92 Buick Regal with a 3.8L V6 engine (Saginaw Pump #26025515).

# FRONT SUSPENSION (LEFT SIDE) and TIE RODS



P893523

## FRONT SUSPENSION (LEFT SIDE) and TIE RODS

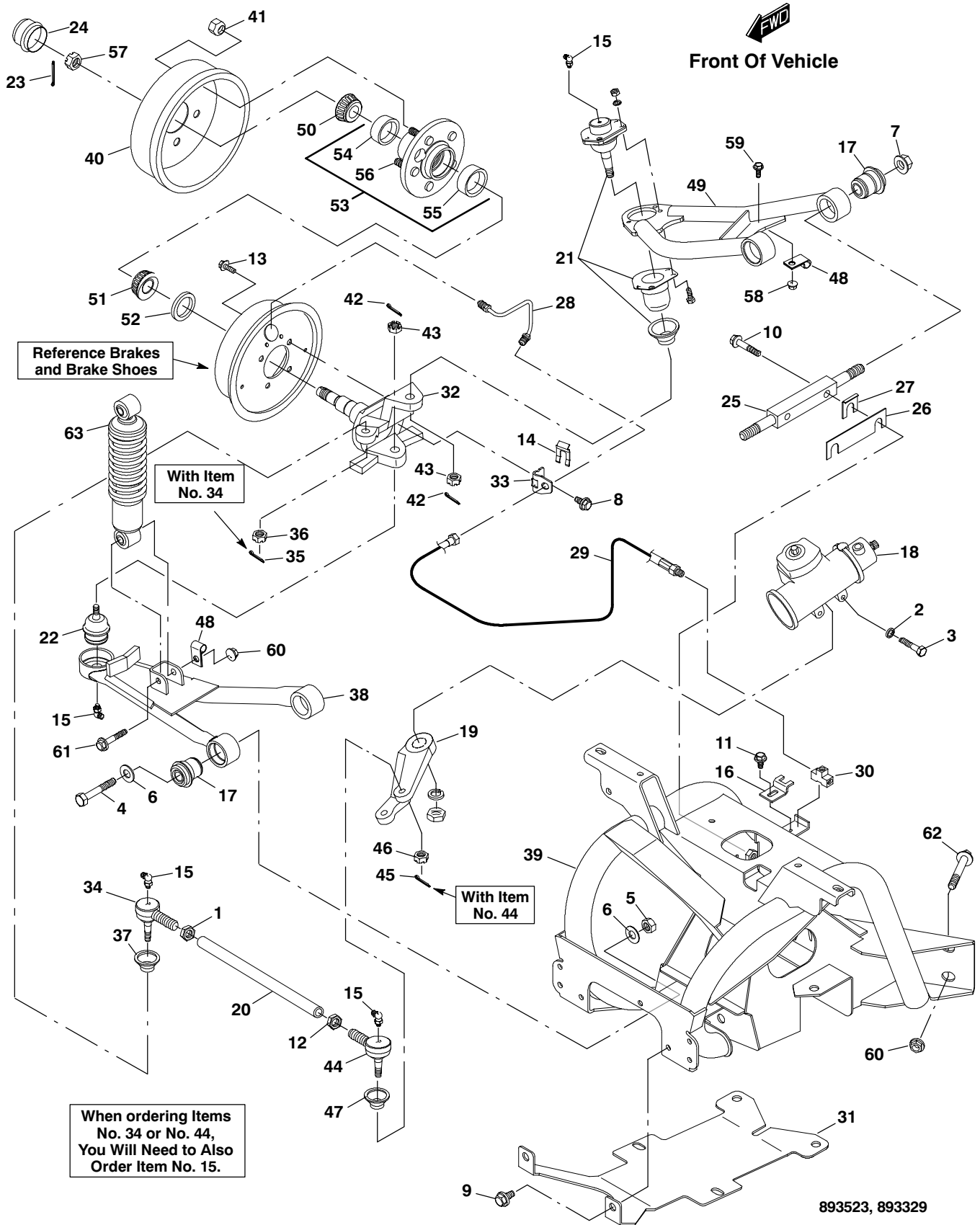
Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	302944	Nut, jam, 9/16-18	1	*	548224	•Fitting, lubrication	1
2	450077	Bolt, M16-2.00 x 90	2	28	311537	Nut, castle 3/4-16	1
3	450382	Nut, M16-2.00, locking insert	2	29	816586	Retainer, grease	1
4	450393	Washer, M16	4	30	893233	Arm assembly, lower control	1
5	450457	Nut, M16-2.00, flange (G10.9)	2	31	841430	Drum, brake	1
6	452398	Screw, M10-1.5 x 20 (8.8)	1	32	800909	Nut, wheel retaining, M12-1.50	5
7	800945	Bolt, M12-1.75 x 60 (G10.9)	2	33	306328	Pin, cotter, 3/32 x 3/4	2
8	800485	Nut, 9/16-18, left-hand	1	34	306825	Nut, castle, 7/16-20	2
9	800919	Bolt, M10-1.5 x 30 (G10.9)	4	35	887750	End, tie rod (LH thread)	1
10	809137	Clip	1	36	306328	•Pin, cotter, 3/32 x 3/4	1
11	810437	Clamp	4	*	548224	•Fitting, lubrication	1
12	831405	Fitting, grease, 1/4-28 (90°)	4	37	311537	Nut, castle 3/4-16	1
13	841167	Bushing, silentbloc	4	38	816586	Retainer, grease	1
14	841404	Rod, tie	1	39	893266	Arm assembly, upper control	1
15	844148	Ball joint, upper	1	40	311537	Nut, castle 3/4-16	1
16	841429	Ball joint, lower	1	41	385174	Bearing, cone (outer)	1
17	817250	Cap, grease	1	42	815403	Bearing, cone (inner)	1
18	304636	Pin, cotter 1/8 x 1 1/8"	1	43	817928	Seal, grease	1
19	841630	Trunnion, control arm	1	44	893206	Hub assembly	1
20	841737	Shim, .060"	4	45	808088	•Cup, bearing (outer)	1
21	841738	Shim, .024"	2	46	814474	•Cup, bearing (inner)	1
22	841840	Tube, brake (left)	1	47	800908	•Screw, lug M12-1.50 x 42	5
23	841841	Hose, brake	1	48	450452	Nut, M6-1.00 (G10.9)	1
24	894573	Knuckle, steering (left)	1	49	452378	Screw, M6-1.00 x 20 (G10.9)	1
25	842104	Bracket, brake tube	1	50	450455	Nut, M12-1.75 (G10.9)	4
26	887512	End, tie rod (RH thread)	1	51	452413	Screw, M12-1.75 x 60	4
27	306328	•Pin, cotter, 3/32 x 3/4	1	52	894635	Strut ay, (shock & spring)	1

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.

\* Not Illustrated. Although this lubrication fitting is the standard fitting used with this tie rod, it is **not** used in this application. Use Ref. No. 12, Part No. 831405.

If ordering Ref. No's. 26 (887512) or 35 (887750) you will also need to order Ref. No. 12 (831405).

# FRONT SUSPENSION (RIGHT SIDE) TIE RODS and SKID PLATE



## FRONT SUSPENSION (RIGHT SIDE) TIE RODS and SKID PLATE

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	302944	Nut, jam, 9/16-18	1	34	887512	End, tie rod (RH thread)	1
2	303269	Lockwasher, 7/16	3	35	306328	•Pin, cotter, 3/32 x 3/4	1
3	311392	Screw, 7/16-14 x 2	3	*	548224	•Fitting, lubrication	1
4	450077	Bolt, M16-2.00 x 90	2	36	306825	Nut, castle, 7/16-20	1
5	450382	Nut, locking insert M16-2.00	2	37	816586	Retainer, grease	1
6	450393	Washer, M16	4	38	893234	Arm assembly, lower control	1
7	450457	Nut, M16-2.00, flange (G10.9)	2	39	893421	Frame assembly, front	1
8	452398	Screw, M10-1.5 x 20 (8.8)	1	40	841430	Drum, brake	1
9	452408	Screw, M10-1.75 x 20 (G10.9)	6	41	800909	Nut, wheel retaining, M12-1.50	5
10	800945	Bolt, M12-1.75 x 60 (G10.9)	2	42	306328	Pin, cotter, 3/32 x 3/4	2
11	452692	Screw, M6-1.00 x 12	1	43	306825	Nut, castle, 7/16-20	2
12	800485	Nut, 9/16-18, left-hand	1	44	887750	End, tie rod (LH thread)	1
13	800919	Bolt, M10-1.5 x 30	4	45	306328	•Pin, cotter, 3/32 x 3/4	1
14	809137	Clip	1	*	548224	•Fitting, lubrication	1
15	831405	Fitting, grease 1/4-28 (90°)	4	46	306825	Nut, castle, 7/16-20	1
16	843418	Clamp, tee	1	47	816586	Retainer, grease	1
17	841167	Bushing, silentbloc	4	48	810437	Clamp	4
18	841255	Gear, power steering	1	49	893266	Arm assembly, upper control	1
19	841336	Arm, pitman	1	50	385174	Bearing, cone (outer)	1
20	841404	Rod, tie	1	51	815403	Bearing, cone (inner)	1
21	844148	Ball joint, upper	1	52	817928	Seal, grease	1
22	841429	Ball joint, lower	1	53	893206	Hub assembly	1
23	304636	Pin, cotter 1/8 x 1 1/8	1	54	808088	•Cup, bearing (outer)	1
24	817250	Cap, grease	1	55	814474	•Cup, bearing (inner)	1
25	841630	Trunnion, control arm	1	56	800908	•Screw, lug M12-1.50 x 42	5
26	841737	Shim, .060"	4	57	311537	Nut, castle 3/4-16	1
27	841738	Shim, .024"	2	58	450452	Nut, M6-1.00, flange (G10.9)	1
28	841839	Tube, brake (right)	1	59	452378	Screw, M6-1.00 x 20	1
29	841841	Hose, brake	1	60	450455	Nut, M12-1.75 (G10.9)	12
30	841842	Tee, union, M10-1.00 flare	1	61	452413	Screw, M12-1.75 x 60	4
31	842033	Plate, skid	1	62	452415	Screw, M12-1.75 x 80 (8.8)	8
32	894574	Knuckle, steering (right)	1	63	894635	Strut ay. (shock & spring)	2
33	842104	Bracket, brake tube	1				

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.

\* Not Illustrated. Although this lubrication fitting is the standard fitting used with this tie rod, it is **not** used in this application. Use Ref. No. 15, Part No. 831405.

If ordering Ref. No.'s. 34 (887512) or 44 (887750) you will also need to order Ref. No. 15 (831405).

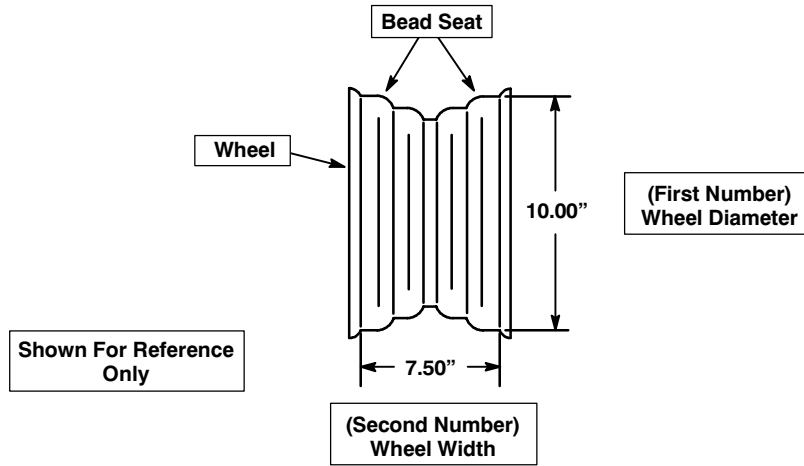
## WHEEL SIZE MEASUREMENT

**Wheel size** is determined by measuring the wheel at the bead seat.

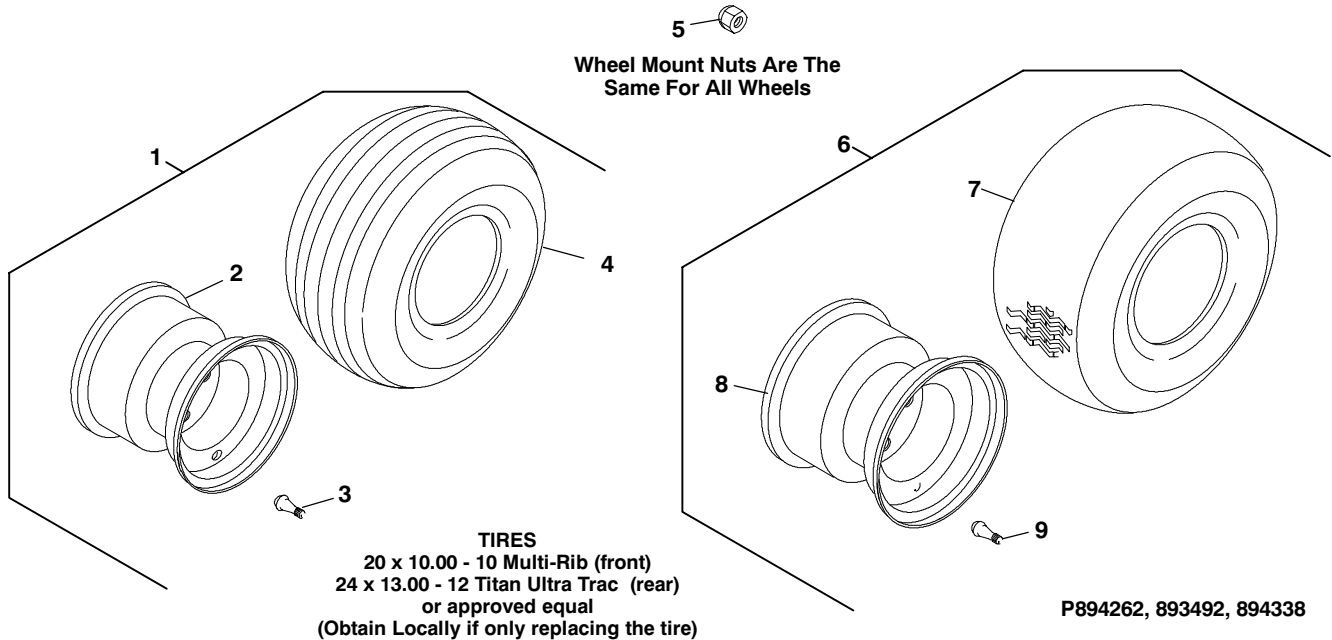
The **first number** is the **wheel diameter** measured at the bead seat.

The **second number** is the **wheel width** measured at the bead seat.

The illustration below shows an **example** of how to measure the wheel to determine tire size.



## FRONT and REAR TIRES FOR TURF MODELS



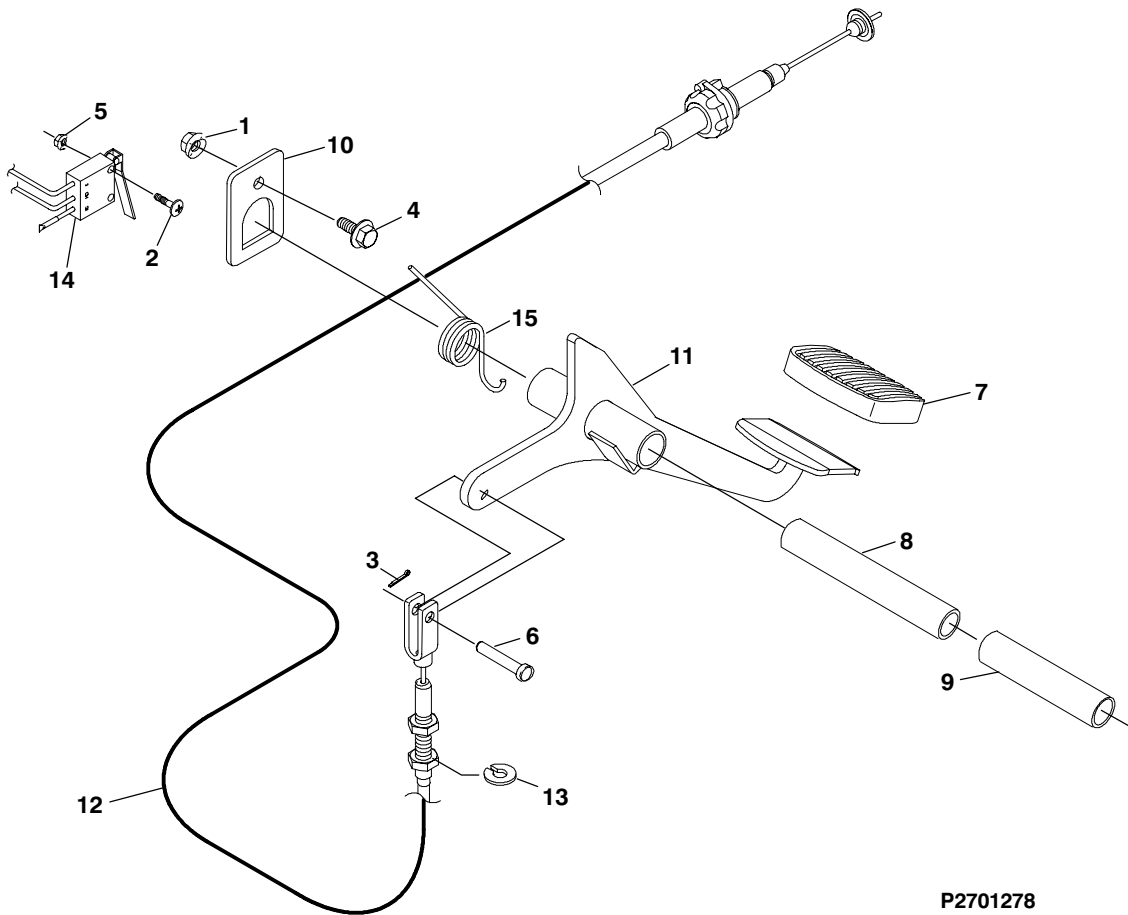
Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	894763	Tire and wheel (front)	2	6	894762	Tire and wheel (rear)	2
2	841433	•Wheel, 10.00 x 7.50, five bolt	1	7	◇◇	•Tire, 24 x 13.00 - 12, Titan ultra trac or approved equal (rear)	1
3	886735	•Stem, valve	1	8	841434	•Wheel, 12.00 x 10.50	1
4	◇◇	•Tire, 20 x 10.00 - 10, multi-rib	1	9	886735	•Stem, valve	1
5	800909	Nut, wheel mount	20				

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY

◇◇ Obtain locally



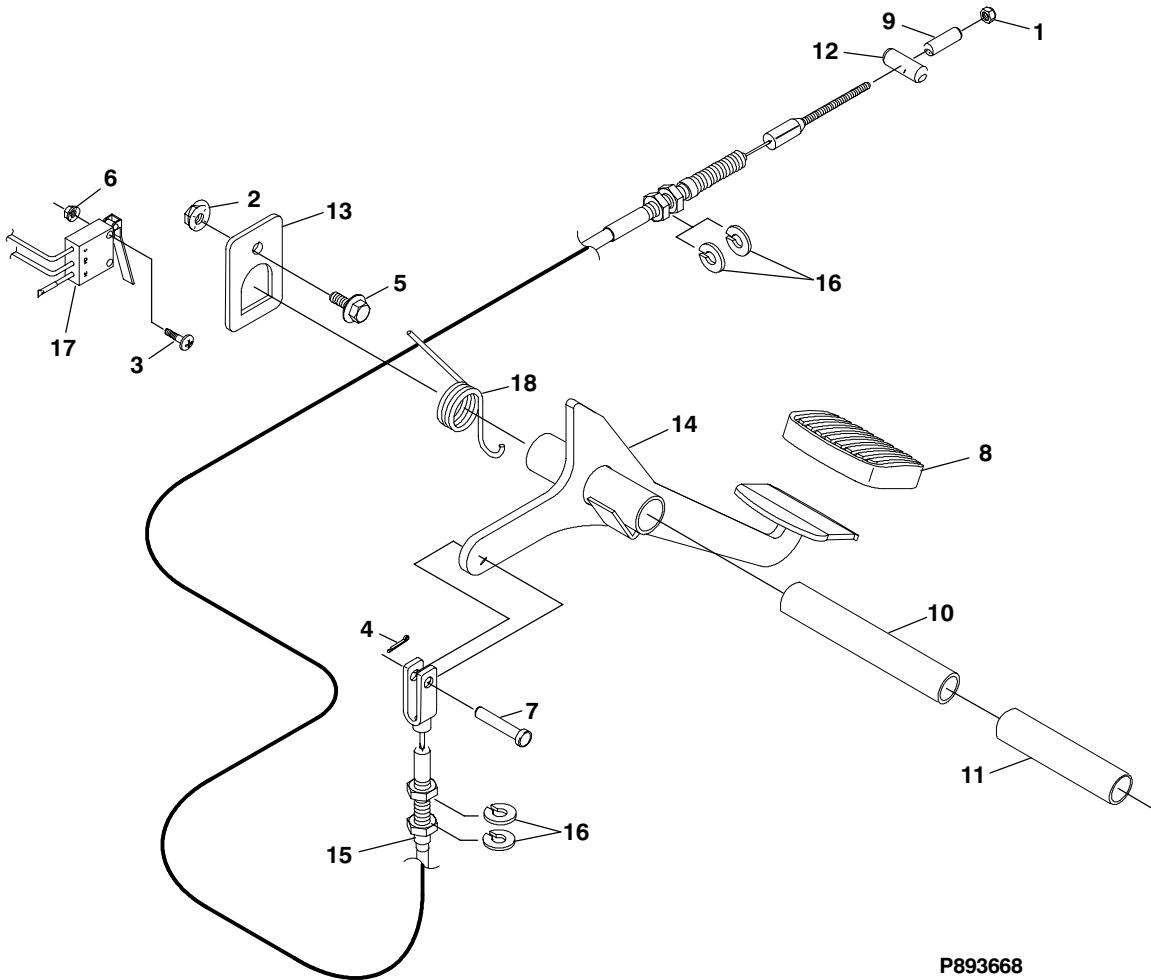
## CLUTCH PEDAL and CABLE (GASOLINE)



P2701278

Ref. No.	Part No.	Description	No. Req'd	Notes
1	450453	Nut, M8-1.25 (G10.9) . . . . .	1	
2	450510	Screw, M3-.50 x 20 . . . . .	2	
3	306328	Pin, cotter, 3/32 x 3/4 . . . . .	1	
4	452388	Screw, M8-1.25 x 20 (8.8) . . . . .	1	
5	452424	Nut, flange M3-.50 . . . . .	2	
6	806714	Pin, clevis, 5/16 x 15/16 . . . . .	1	
7	810152	Cover, pedal . . . . .	1	
8	840725	Pin, brake pivot . . . . .	1	
9	840726	Bearing, brake pivot . . . . .	1	
10	842935	Tab, locking . . . . .	1	
11	892933	Lever, clutch . . . . .	1	
12	895013	Cable, clutch . . . . .	1	
13	844202	Washer, slotted . . . . .	4	
14	890808	Switch, clutch interlock . . . . .	1	
15	844611	Spring, torsion . . . . .	1	

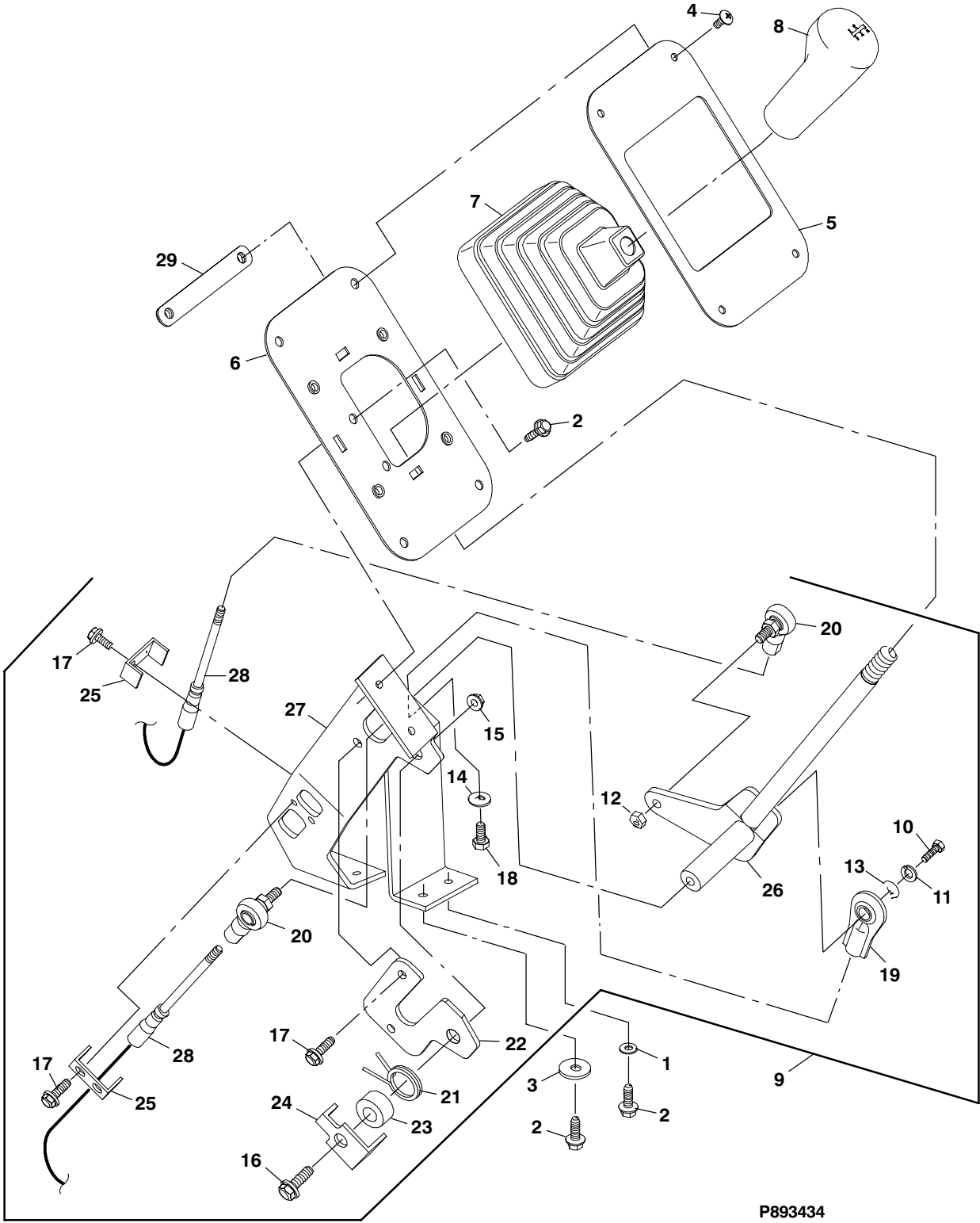
## CLUTCH LINKAGE (DIESEL)



P893668

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	450377	Nut, M6-1.00, staytite	1	10	840725	Pin, brake pivot	1
2	450453	Nut, M8-1.25 (G10.9)	1	11	840726	Bearing, brake pivot	1
3	450510	Screw, M3-.50 x 20	2	12	842010	Bushing, clutch arm	1
4	306328	Pin, cotter, 3/32 x 3/4	1	13	842935	Tab, locking	1
5	452388	Screw, M8-1.25 x 20 (8.8)	1	14	892933	Lever, clutch	1
6	452424	Nut, flange M3-.50	2	15	894299	Cable, clutch	1
7	806714	Pin, clevis, 5/16 x 15/16	1	16	844202	Washer, slotted	4
8	810152	Cover, pedal	1	17	890808	Switch, clutch interlock	1
9	833273	Bushing	1	18	844611	Spring, torsion	1

# SHIFTER and SHIFTER LINKAGE



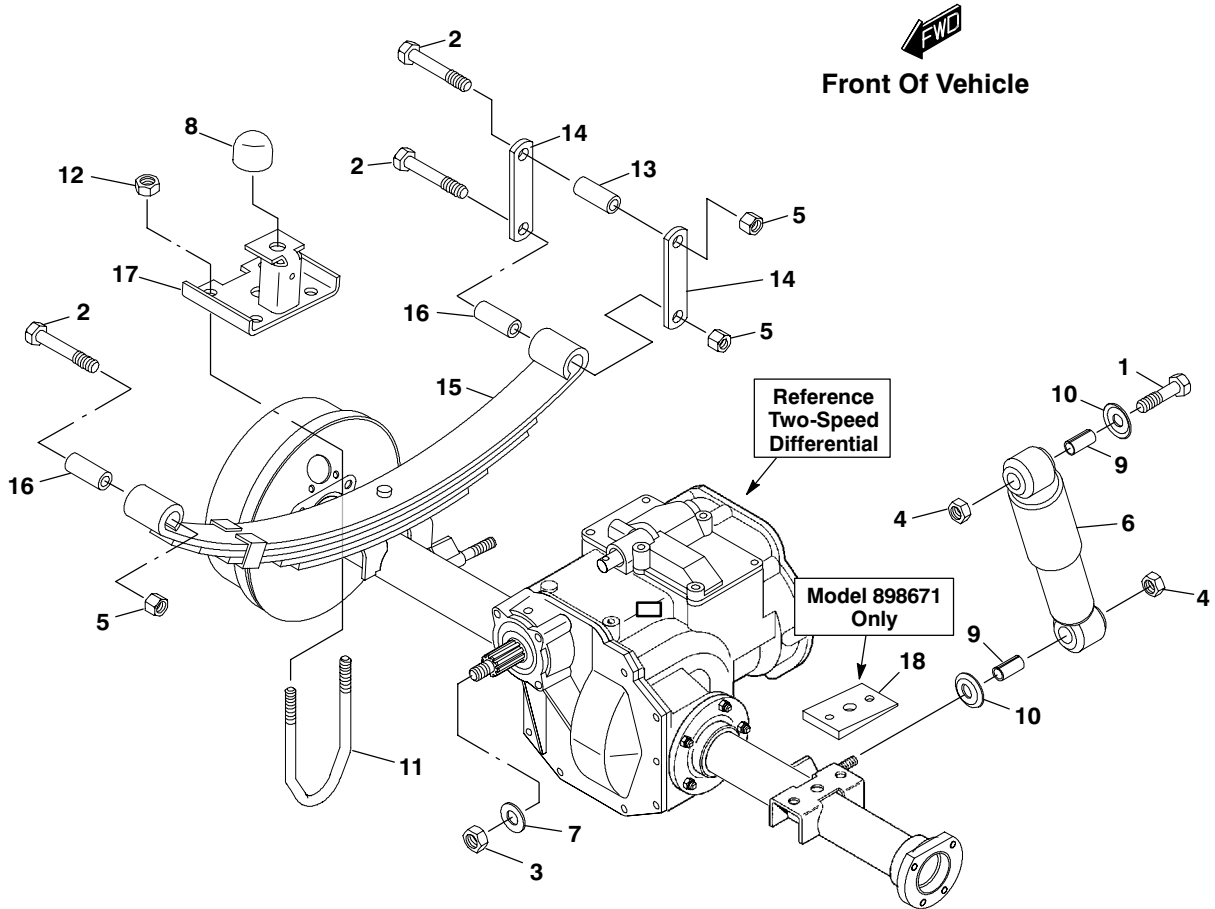
P893434

## SHIFTER and SHIFTER LINKAGE

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	308090	Washer, 1/4	5	16	452400	•Screw, M10-1.50 x 30 (8.8)	1
2	452695	Screw, M6-1.00 x 20, taptite	6	17	452695	•Screw, M6-1.00 x 20, taptite	6
3	548175	Washer, 1/4 x 1.25	3	18	548008	•Screw, 1/2-20 x 1	1
4	800582	Screw, 1/4-20 x 3/4	4	19	842773	•Rod end, 1/2" (female)	1
5	843792	Plate, shifter boot	1	20	842774	•Ball joint, 1/4"	2
6	841265	Panel, dash (right hand)	1	21	843614	•Spring, torsion	1
7	28135-85503-5PK	Boot, shifter	1	22	843679	•Plate, wear	1
8	28113-70B01-5PK	Knob, shifter	1	23	843685	•Bushing, spring	1
9	893966	Shifter, complete	1	24	843686	•Tab, locating	1
10	300977	•Screw, 1/4-28 x 5/8	1	25	843724	•Clamp, cable	2
11	306396	•Lockwasher, 1/4	1	26	893967	•Selector, complete	1
12	306397	•Nut, 1/4-28	1	27	893968	•Mount, shifter	1
13	308090	•Washer, 1/4	1	28	894179	•Cable, shifter	2
14	308091	•Washer, 1/2	1	29	894743	Nut assembly, double (1/4-20)	1
15	450454	•Nut, M10-1.50 (G10.9)	1				

• INDENTED PARTS NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.

# REAR SPRING, SHACKLES, U-BOLTS and REAR SHOCK ABSORBERS

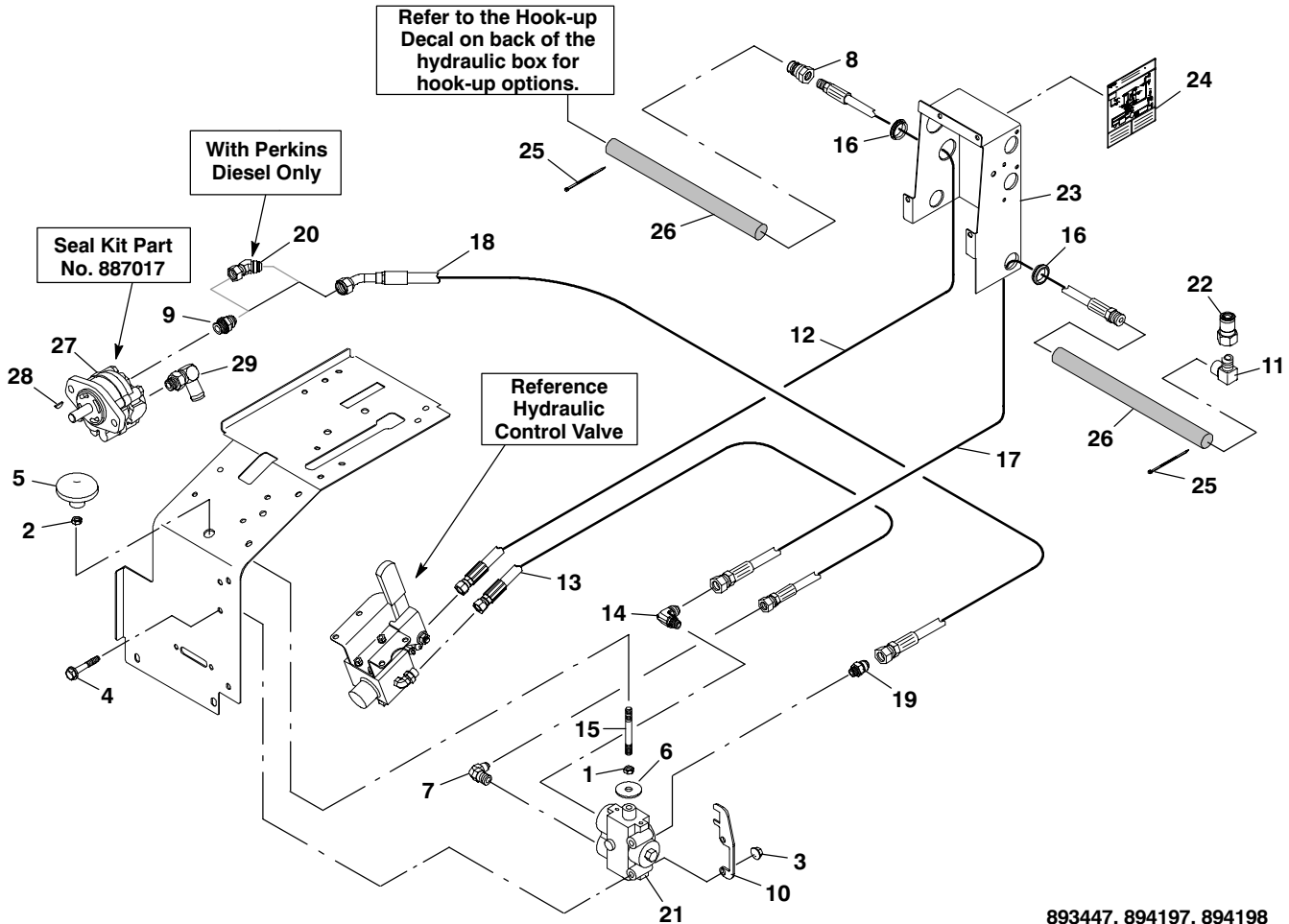


P894510, P893435, P2701117

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	311396	Screw, 7/16-14 x 2 1/4	2	10	825500	Washer, 3/8	4
2	311398	Screw, 1/2-13 x 3 1/2	6	11	887187	U-bolt, 2"	4
3	800198	Nut, 1/2-20 crownlock	1	12	548061	•Nut, 7/16-20 unitorg	2
4	800294	Nut, 7/16-14 crownlock	4	13	843238	Bushing, nylatron	2
5	800602	Nut, 1/2-13	6	14	843876	Shackle, rear spring	4
6	807332	Shock absorber	2	15	893862	Spring, leaf	2
7	809180	Washer, 7/16	1	16	843238	•Bushing, nylatron	2
8	813850	Bumper, rubber	2	17	893613	Upstop	2
9	823621	Bushing	4	18	838409	Spacer, leaf spring (970 only)	2

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEEDING ASSEMBLY.

# HYDRAULIC CONTROL VALVE SYSTEM



893447, 894197, 894198

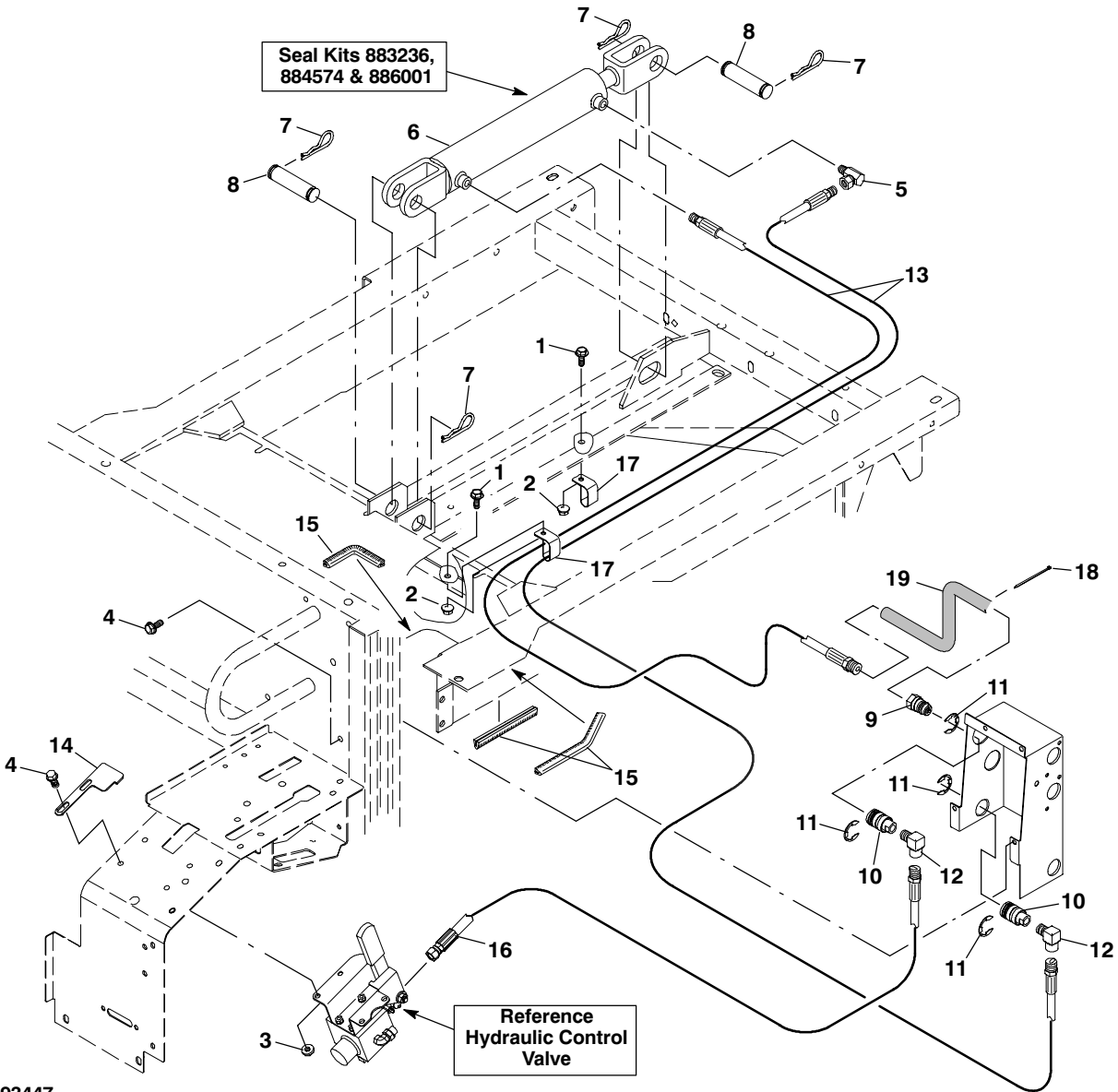
Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	304632	Nut, jam 3/8-16	1	17	844600	Hose, hydraulic 1/2 x 39"	1
2	306388	Nut, jam 3/8-24	1	18	844628	Hose, hydraulic 3/8 x 18"	1
3	450453	Nut, M8-1.25 (G10.9)	2	19	844652	Adapter, straight	1
4	452392	Screw, M8-1.25 x 50 (8.8)	2	20	844517	Fitting, 45° swivel (Perkins only)	1
5	548171	Knob	1	21	894696	Valve, hydraulic selector	1
6	822419	Washer, flat (1.62 dia.)	1	22	894702	Nipple, hydraulic, dry seal	1
7	826558	Elbow, 90° w/o-ring	1	23	2700800	Cover, hydraulics w/decal	1
8	832408	Coupler, half (male)	1	24	837270	•Decal, hydraulic connections	1
9 ♦	844566	Fitting, hydraulic	1	(23)	2700801	Cover, hydraulics w/decal (EC)	1
10	832798	Plate, stop	1	*	840857	•Decal, remote hydraulics (EC)	1
11	835101	Fitting, hydraulic 90°	1	25	320107	Tie cable 7 1/2" (190 mm)	2
12	841892	Hose, hydraulic 1/4 x 42"	1	26	840877	Sleeve, nylon	2
13	844019	Hose, hydraulic 3/8 x 17"	2	27♦	888042	Pump, hydraulic	1
14	844571	Adapter, 90° elbow	1	28	306560	•Key, woodruff #5	1
15	844582	Rod, handle extension	1	*	887017	Kit, seal, hydraulic pump	1
16	844584	Bushing, flip-lok	2	29♦	844583	Fitting, 90° adapter	1

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.

\* Not Illustrated.

♦ Although Ref. No. 27 (hydraulic pump, Part No. 888042) is shipped with two hydraulic fittings, these fittings **are not** used in this application. When ordering Ref. No. 27 you will also need to order hydraulic fittings Ref. No's 9 & 29. These fittings are the correct fittings to use in this application.

# HYDRAULIC LIFT SYSTEM

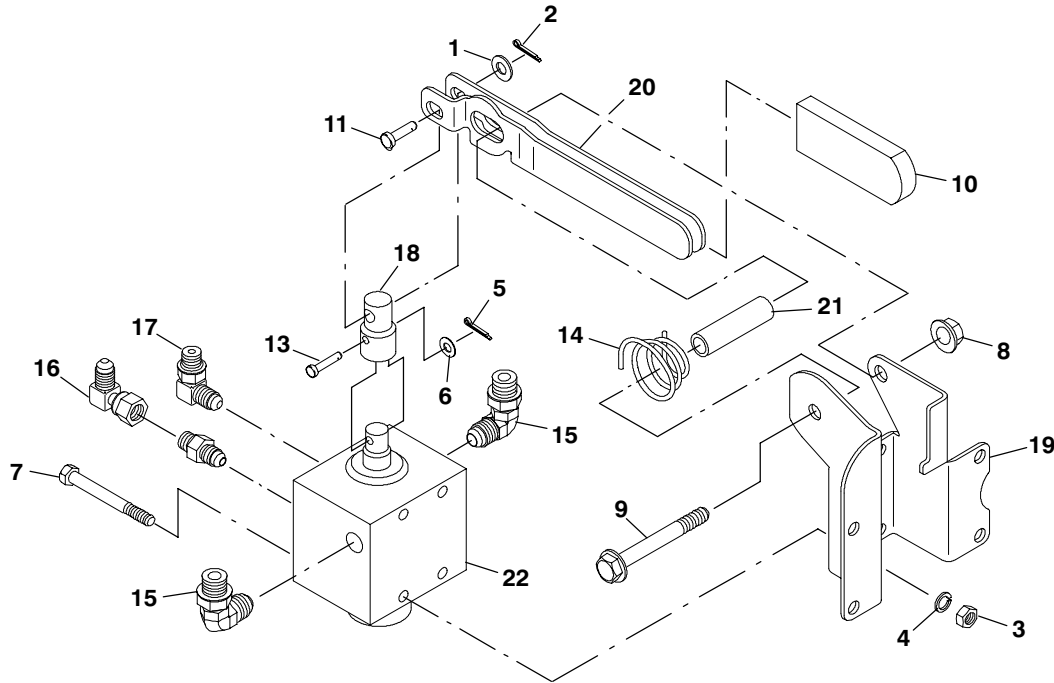


893447

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	452378	Screw, M6-1.00 x 20	2	9	832408	Coupler half, male	1
2	450452	Nut, M6-1.00 (G10.9)	2	10	832409	Coupler half, female	2
3	450453	Nut, M8-1.25 (G10.9)	4	11	832414	Ring, retaining	4
4	800930	Screw, M8-1.25 x 16 (8.8)	8	12	835101	Fitting, hydraulic 90°	2
5	823119	Adapter, 90°	1	13	832900	Hose, hydraulic, 1/4 x 38"	2
6	882993	Cylinder, lift	1	14	844051	Plate, float latch	1
7	809265	•Pin, hair	4	15	821893	Trim, push-on	As Req'd.
8	830810	•Pin, clevis	2	16	844598	Hose, hydraulic, 1/4 x 30"	1
*	883236	•Kit, seal	1	17	817320	Clamp, hose	2
*	884574	•Kit, seal	1	18	320107	Tie, cable 7 1/2" (190 mm)	2
*	886001	•Kit, seal	1	19	840877	Sleeve, nylon	1

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.  
 \* Not Illustrated.

## HYDRAULIC CONTROL VALVE

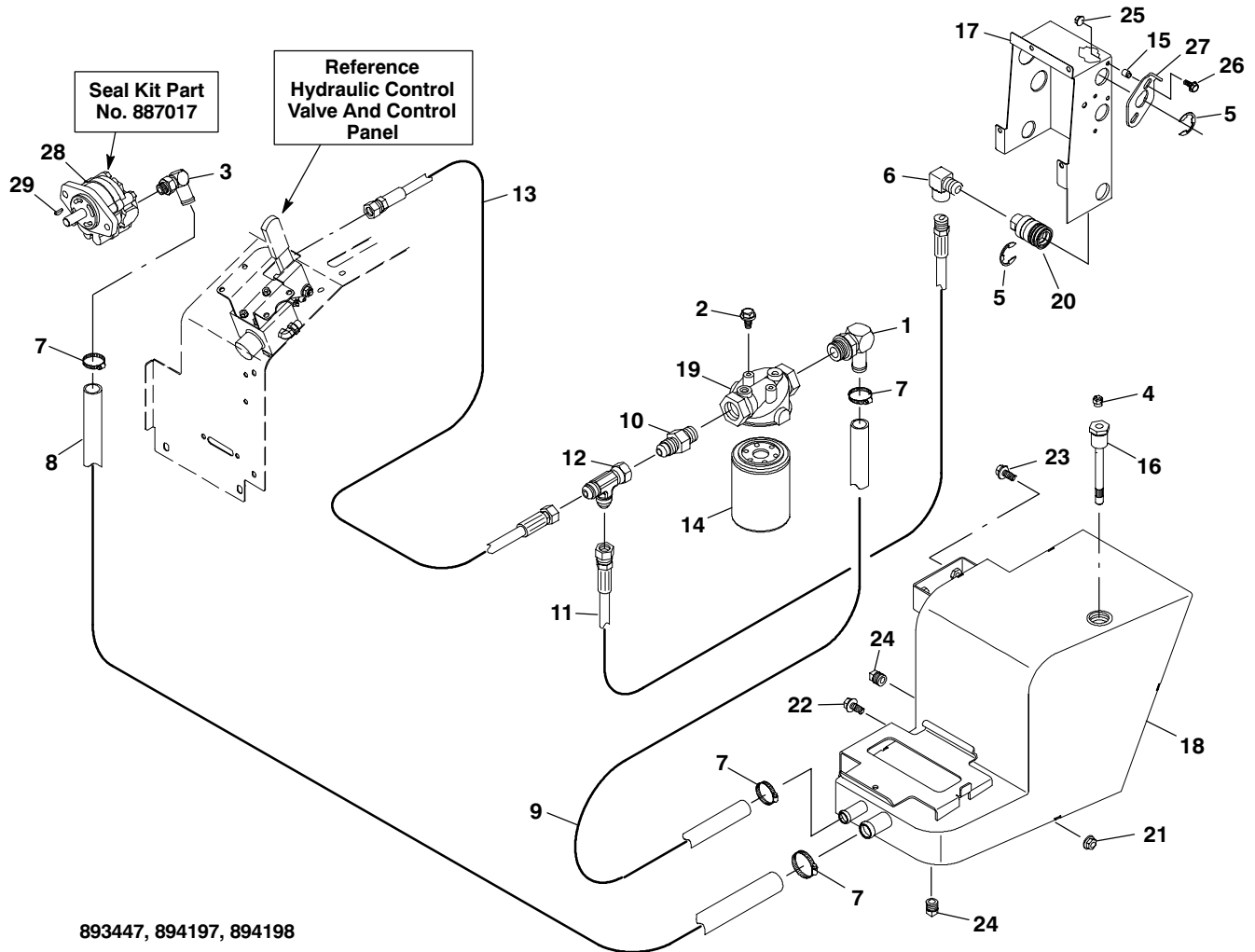


894233

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	103867	Washer, 5/16	1	12	823118	Fitting, hydraulic straight	1
2	306328	Pin, cotter 3/32 x 3/4	1	13	823225	Pin, clevis 3/16 x 1	1
3	306375	Nut, 1/4-20	4	14	825538	Spring, compression	1
4	306396	Lockwasher, 1/4	4	15	844454	Elbow, 90° w/o-ring	2
5	306463	Pin, cotter 1/16 x 1/2	1	16	828056	Fitting	1
6	308089	Washer, #10	1	17	828057	Fitting	1
7	316907	Screw, 1/4-20 x 2 3/4	4	18	839213	Connector, valve	1
8	450454	Nut, M10-1.50 (G10.9)	1	19	843355	Mount, control valve	1
9	452404	Screw, M10-1.50 x 70 (8.8)	1	20	843758	Handle, control valve	1
10	521144	Cover, handle	1	21	843759	Bushing, control valve	1
11	814079	Pin, clevis 5/16 x 1 1/8	1	22	886270	Valve, hydraulic	1



## HYDRAULIC FILTER and RESERVOIR



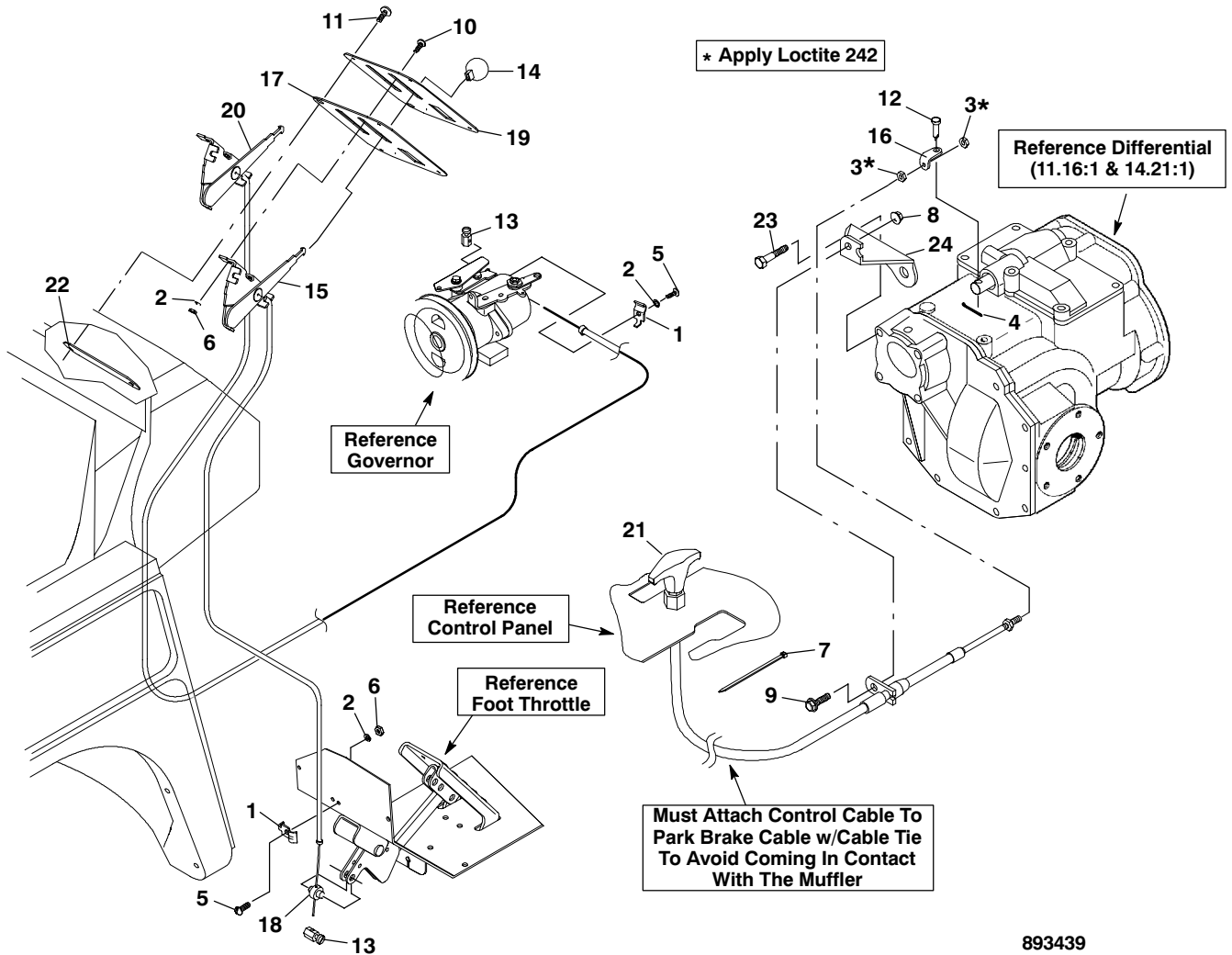
893447, 894197, 894198

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	523768	Adapter, 90° elbow	1	17	2700800	Cover, hydraulics w/decals	1
2	548827	Screw, 1/4-20 x 1/2	2	*	837270	•Decal, hydraulic connections	1
3	844583	Fitting, 90° adapter	1	(17)	2700801	Cover, hydraulics w/decals	1
4	827486	Valve, pressure relief	1	*	840857	•Decal, hydraulic connections	1
5	832414	Ring, retaining	2	18	894675	Tank, hydraulic	1
6	835101	Fitting, hydraulic 90°	1	19	894691	Head, filter	1
7	836206	Clamp, hose	4	20	894701	Coupler, hydraulic dryseal	1
8	844564	Hose, hydraulic, 1" x 26"	1	21	450453	Nut, M8-1.25 (G10.9)	2
9	844565	Hose, hydraulic, 3/4" x 16"	1	22	452388	Screw, M8-1.25 x 20 (G8.8)	2
10	844590	Adapter, straight	1	23	452399	Screw, M10-1.50 x 25 (8.8)	2
11	844600	Hose, hydraulic, 1/2" x 39"	1	24	800113	Plug	2
12	844627	Fitting, swivel tee	1	25	450452	Nut, M6-1.00 (10.9)	2
13	844630	Hose, hydraulic, 3/8" x 21"	1	26	452381	Screw, M6-1.00 x 40 (8.8)	2
14	885249	Element, filter	1	27	844937	Plate, coupler retainer	1
15	844973	Bushing	1	28	888042	Pump, hydraulic	1
16	893539	Dipstick, hydraulic tank	1	29	306560	•Key, woodruff #5	1
				*	887017	Kit, seal, hydraulic pump	1

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.

\* Not Illustrated.

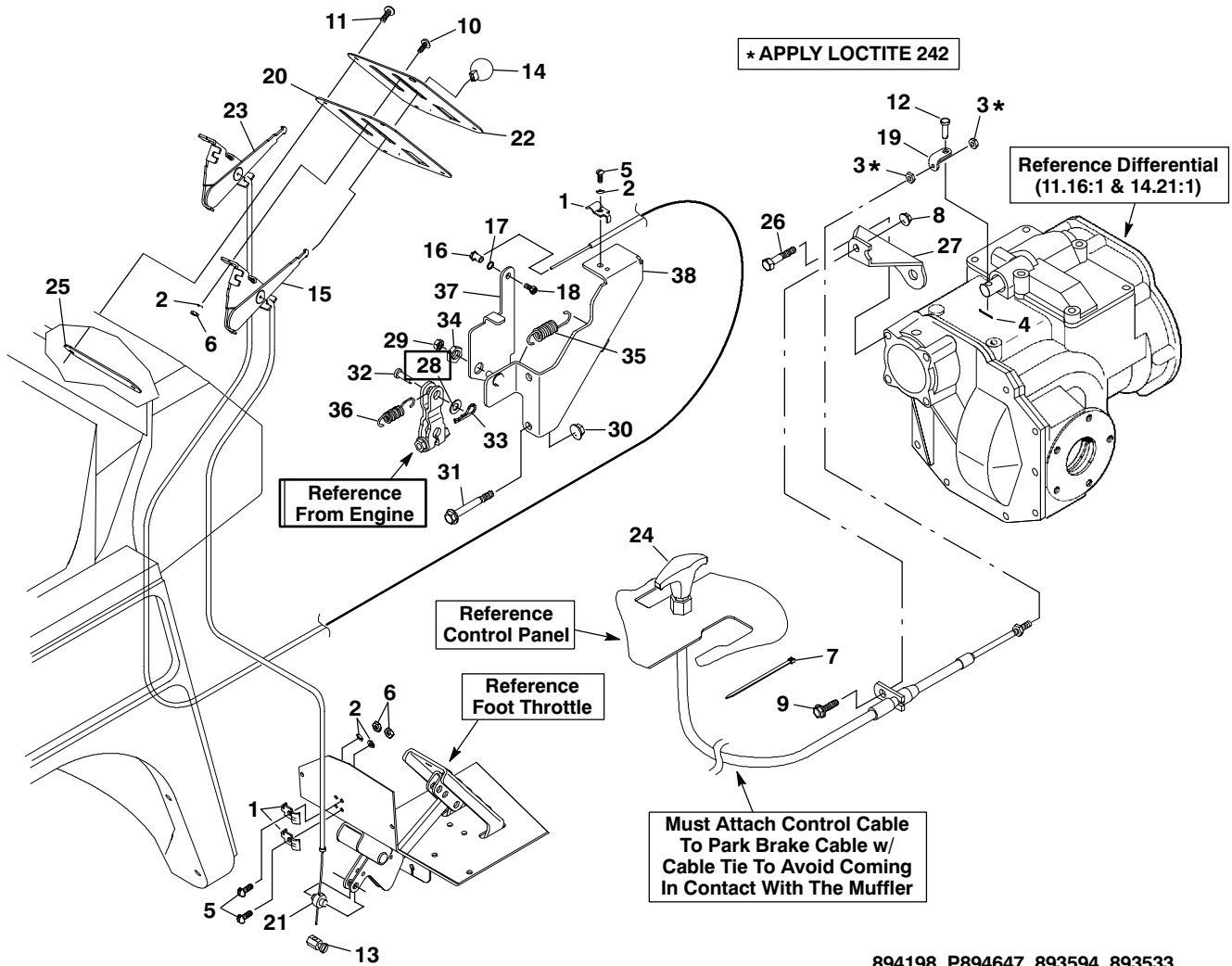
# HAND CONTROLS, GOVERNOR and THROTTLE (GASOLINE)



893439

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	111898	Clamp, cable	2	13	817104	Stop, wire	2
2	120052	Lockwasher, #10	6	14	827821	Knob	2
3	132520	Nut, #10-32	2	15	828049	Cable, control (hand throttle)	1
4	306328	Pin, cotter 29/32 x 3/4	1	16	837043	Bracket (cable to differential)	1
5	306514	Screw, #10-32 x 1/2	2	17	841264	Panel, left hand (turf)	1
6	306531	Nut, #10-24	5	18	843607	Bushing, throttle cable	1
7	320107	Tie, cable 7 1/2" (190.5 mm)	1	19	844116	Decal, left hand dash (turf)	1
8	450452	Nut, M6-1.00 (G10.9)	1	20	844130	Cable, governor control	1
9	452378	Screw, M6-1.00 x 20	1	21	893067	Cable, control (hi-lo shift)	1
10	800271	Screw, #10-24 x 1/2 (G5)	4	22	894743	Nut, double	2
11	800582	Screw, 1/4-20 x 3/4	4	23	307776	Screw, 3/8-16 x 2 3/4	2
12	806703	Pin, clevis 5/16 x 31/32	1	24	836841	Bracket, hi-lo shift cable mount	1

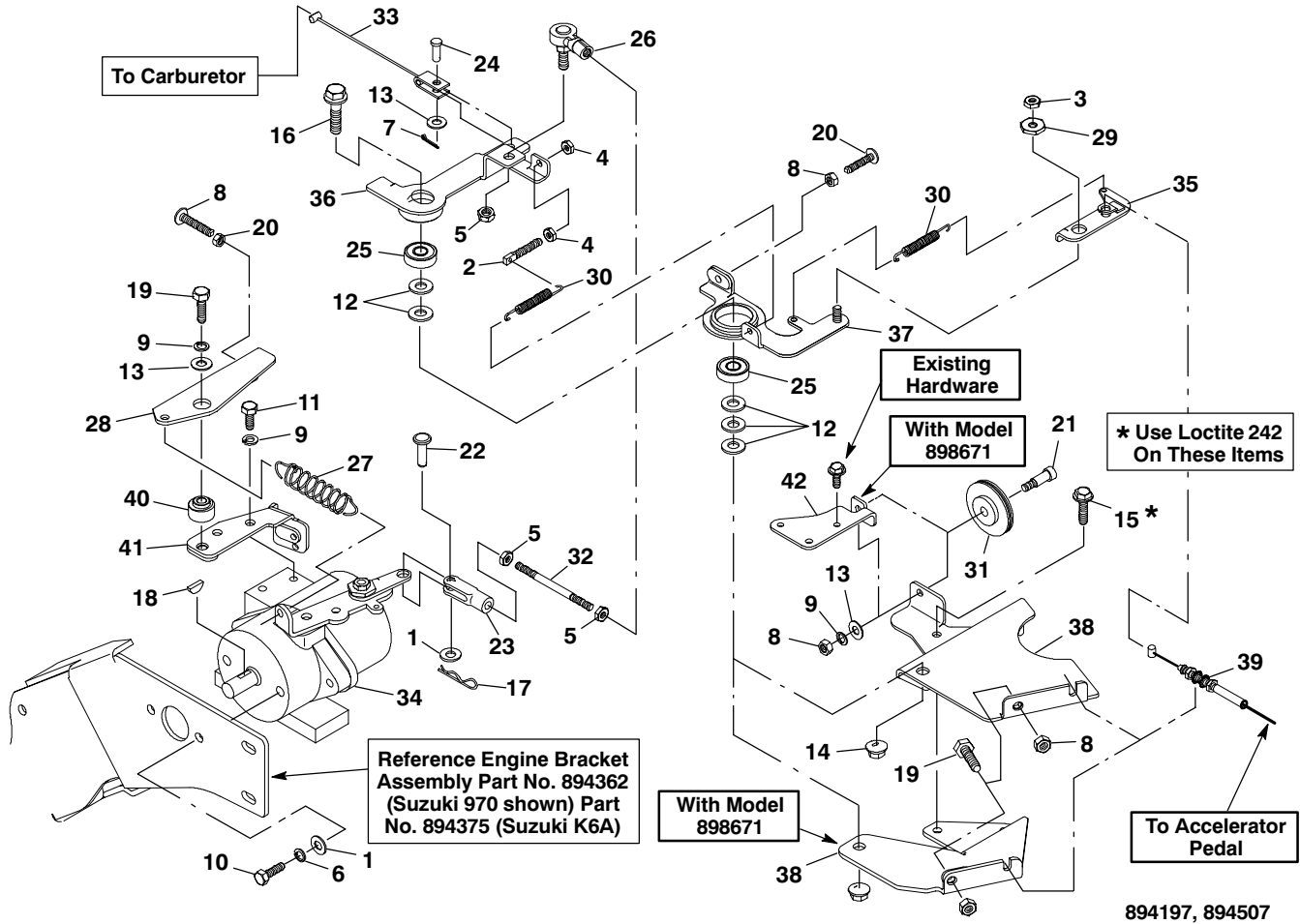
# HAND CONTROLS, GOVERNOR and THROTTLE (DIESEL)



894198, P894647, 893594, 893533

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	111898	Clamp, cable	3	20	841264	Panel, left hand, turf	1
2	120052	Lockwasher, #10	6	21	843607	Bushing, throttle cable	1
3	132520	Nut, #10-32	3	22	844116	Decal, left hand dash, turf	1
4	306328	Pin, cotter 29/32 x 3/4	1	23	844130	Cable, governor control	1
5	306514	Screw, #10-32 x 1/2	3	24	893067	Cable, control (hi-lo shift)	1
6	306531	Nut, #10-24	6	25	894743	Nut, double	2
7	320107	Tie, cable 7 1/2" (190.5 mm)	1	26	307776	Screw, 3/8-16 x 2 3/4	2
8	450452	Nut, M6-1.00 (G10.9)	1	27	836841	Bracket, hi-lo shift cable mount	1
9	452378	Screw, M6-1.00 x 20	1	28	103867	Washer, 5/16	1
10	800271	Screw, #10-24 x 1/2 (G5)	4	29	130728	Nut, 1/4-20 jam	1
11	800582	Screw, 1/4-20 x 3/4	4	30	450453	Nut, M8-1.25 (G10.9)	2
12	806703	Pin, clevis 5/16 x 31/32	1	31	452394	Screw, M8-1.25 x 70 (G8.8)	2
13	817104	Stop, wire	2	32	812444	Pin, clevis 5/16 x 3/4	1
14	827821	Knob	2	33	821164	Pin, hair	1
15	828049	Cable, control (hand throttle)	1	34	835271	Nut	1
16	831888	Swivel	1	35	840473	Spring, extension	1
17	831889	Washer, swivel	1	36	842785	Spring, idle return	1
18	831890	Screw, swivel throttle cable	1	37	844274	Lever, governor	1
19	837043	Bracket	1	38	894591	Bracket, throttle	1

## GOVERNOR and THROTTLE LINKAGE

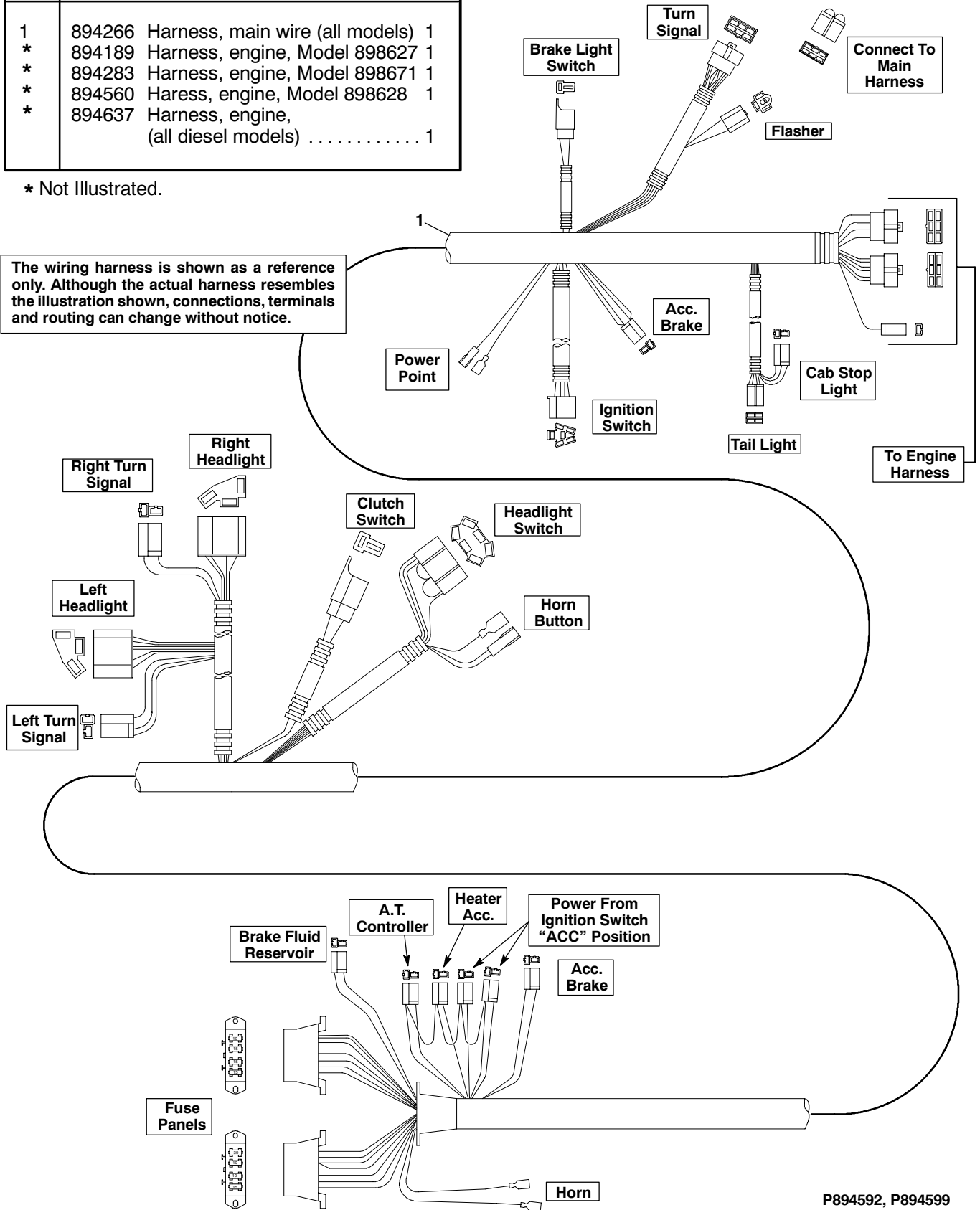


Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	103867	Washer, 3/8	3	23	810722	Yoke	1
2	111893	Screw, special #10-32	1	24	813379	Pin, clevis 1/4 x 3/8	1
3	130728	Nut, 1/4-20	1	25	830140	Bearing, ball	2
4	132520	Nut, jam #10-32	2	26	831586	Ball joint	1
5	306320	Nut, 5/16-24	3	27	833101	Spring, extension	1
6	306325	Lockwasher, 5/16	2	28	894434	Arm assembly, governor	1
7	306372	Pin, cotter 3/32 x 1/2"	1	29	835271	Nut	1
8	306375	Nut, 1/4-20	4	30	840473	Spring, extension	2
9	306396	Lockwasher, 1/4	4	31	843013	Pulley, governor	1
10	306450	Screw, 5/16-18 x 3/4	2	32	843536	Rod, governor arm	1
11	306487	Screw, 1/4-20 x 5/8	2	33	843567	Cable, carburetor	1
12	306981	Washer, 3/8	5	34	4115000	Governor, complete	1
13	308090	Washer, 1/4	3	35	894453	Arm, throttle	1
14	450454	Nut, M10-1.50 (G10)	1	36	894454	Arm, governor	1
15	452378	Screw, M6-1.00 x 20	2	37	894463	Lever	1
16	452401	Screw, M10-1.50 x 40 (8.8)	1	38	894464	Base, throttle (Suzuki K6A)	1
17	548190	Pin, hair 11/16 x 1 7/8	1	(38)	894482	Base, throttle (Suzuki 970)	1
18	553046	Key, woodruff 1/4 x 1/2	1	39	894540	Cable, throttle	1
19	302288	Screw, 1/4-20 x 1	2	40	843866	Bushing, governor	1
20	800024	Screw, 1/4-20 x 1 1/2	2	41	894435	Bracket assembly, governor	1
21	800927	Screw, shoulder, 1/4-20 x 5/8	1	42	842753	Bracket, carburetor (Suzuki 970)	1
22	806773	Pin, clevis 5/16 x 1 1/8	1				

# ENGINE and MAIN WIRE HARNESS

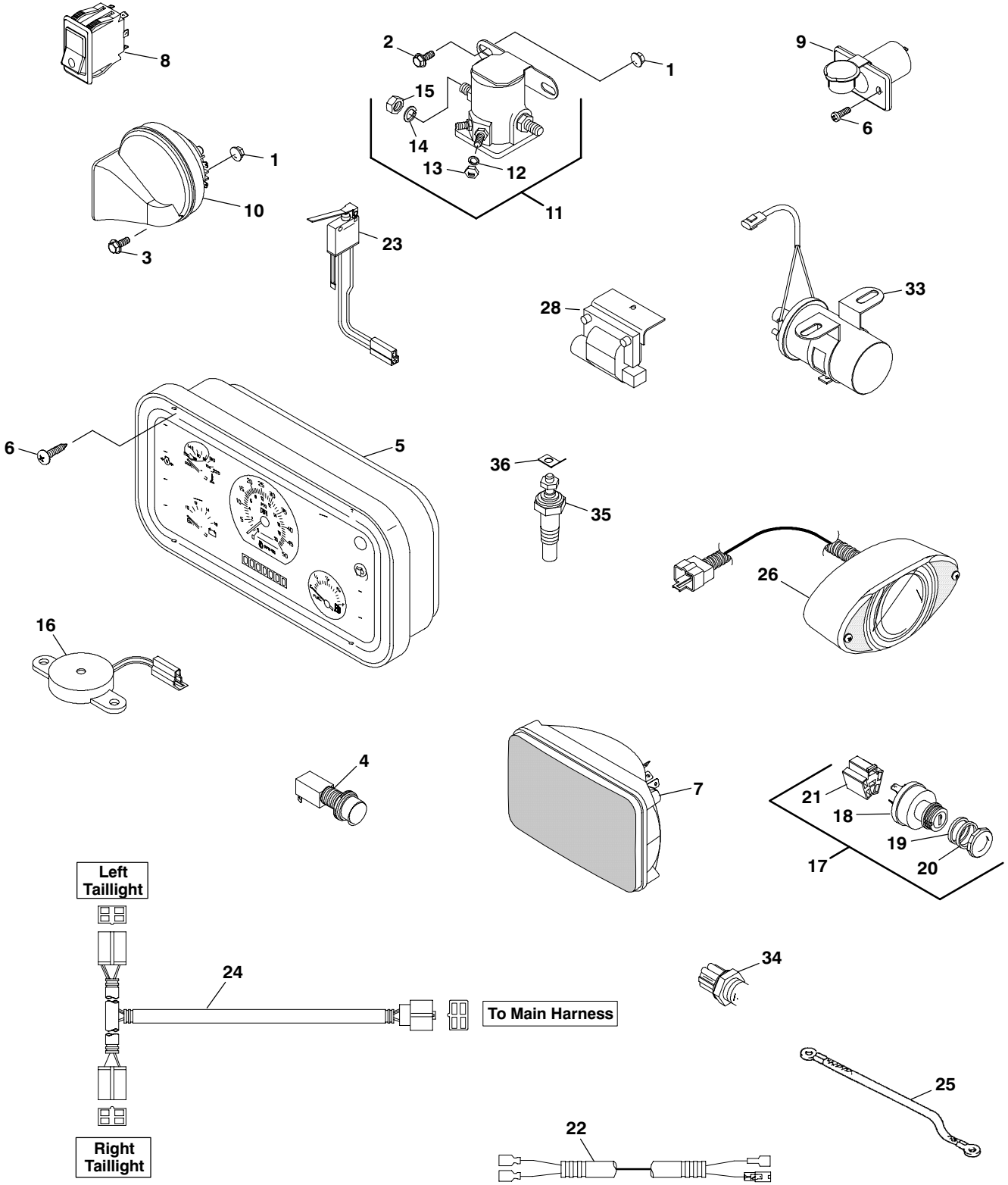
Ref No.	Part No.	Description	No. Req'd.
1	894266	Harness, main wire (all models)	1
*	894189	Harness, engine, Model 898627	1
*	894283	Harness, engine, Model 898671	1
*	894560	Harness, engine, Model 898628	1
*	894637	Harness, engine, (all diesel models)	1

\* Not Illustrated.



P894592, P894599

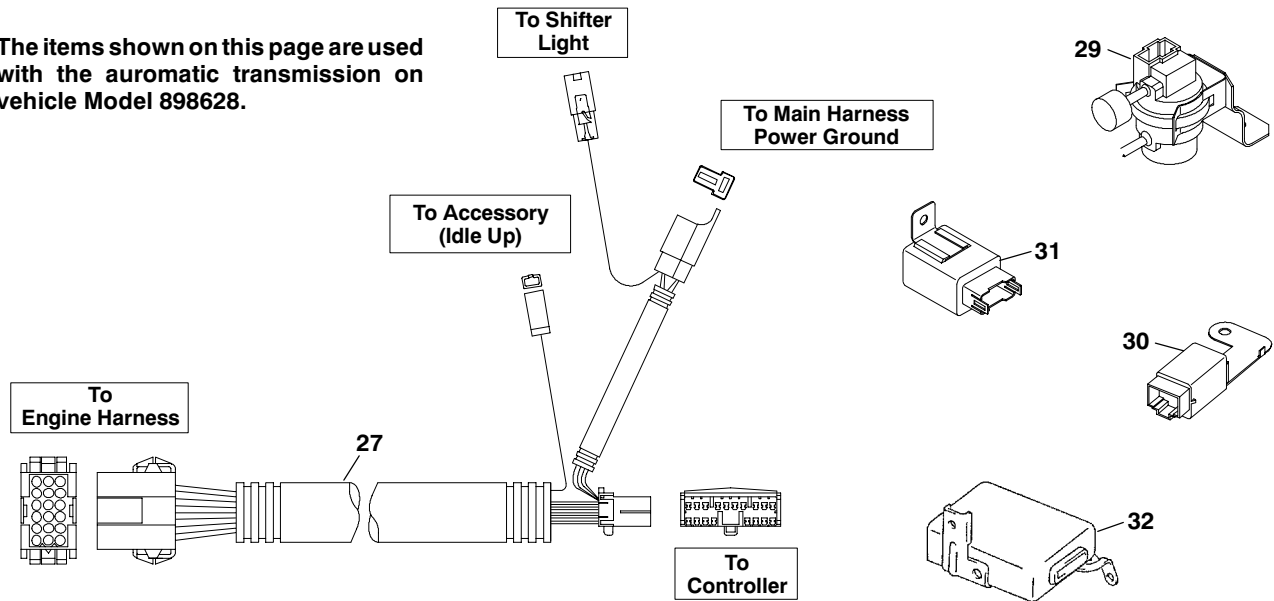
# ELECTRICAL COMPONENTS and WIRING HARNESSES



The wiring harnesses are shown as a reference only. Although the actual harness resembles the illustration shown, connections, terminals and routing can change without notice.

## ELECTRICAL COMPONENTS and WIRING HARNESSSES

The items shown on this page are used with the automatic transmission on vehicle Model 898628.



The convoluted tubing used on the wiring harnesses can be ordered in bulk length only. Cut off the required amount for your particular application. Order the tubing as follows:

Part No. 826190 .350 i.d. sold in 50' (15.2 m) lengths

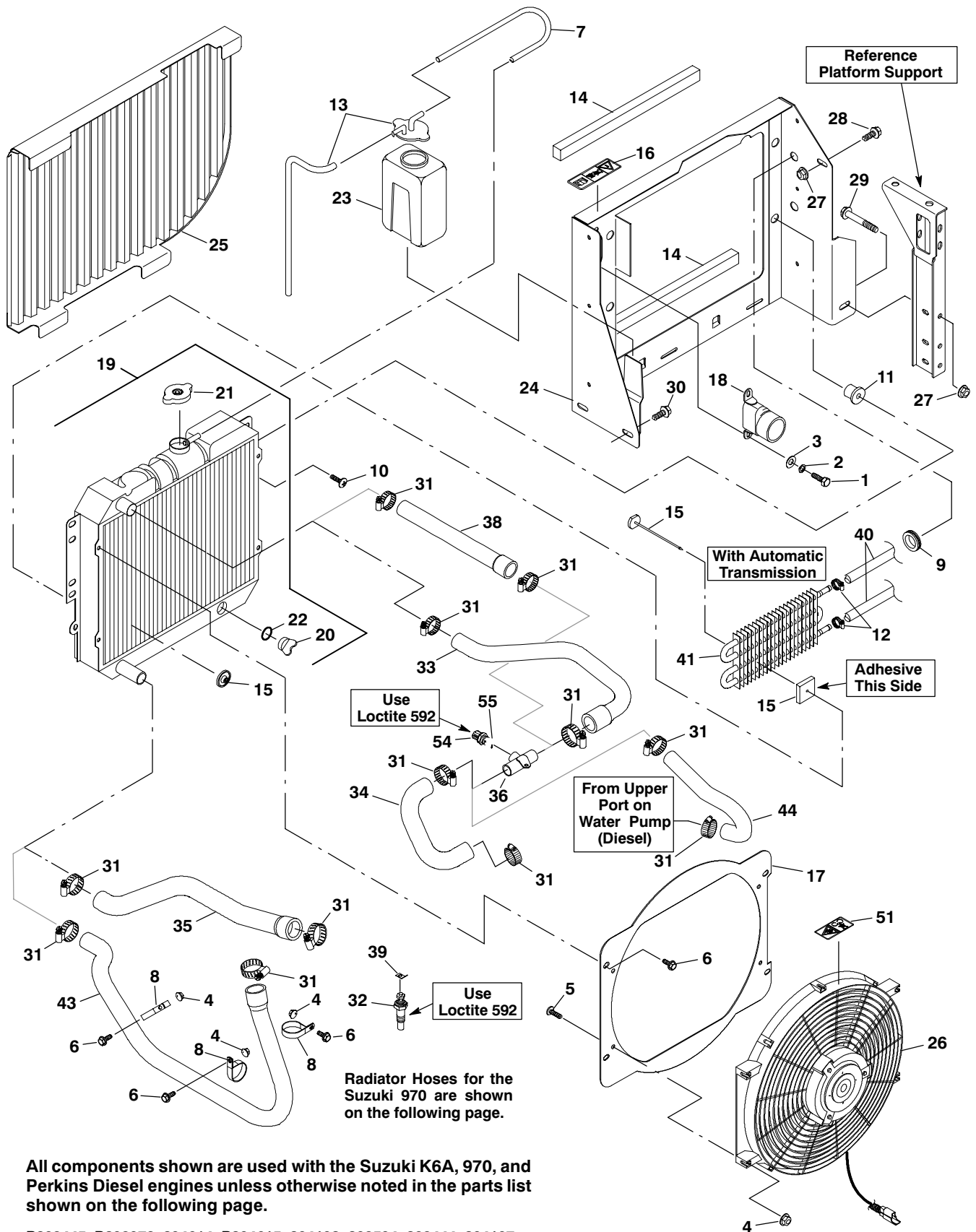
Part No. 826191 .500 i.d. sold in 25' (7.6 m) lengths

Ref. No.	Part No.	Description	No. Req'd.	Ref. No.	Part No.	Description	No. Req'd.
1	450452	Nut, M6-1.00 (G10) .....	3	20	837300	•Spacer .....	1
2	452378	Screw, M6-1.00 x 20 .....	2	21	890158	•Connector and wire .....	1
3	800934	Screw, M6-1.00 x 16 (G10) .....	1	22	894201	Harness, wire, fuel tank .....	1
4	830366	Switch, push (horn button) .....	1	23	894308	Switch (normally open) .....	1
5	841636	Panel, instrument w/tach .....	1	24	894313	Harness, wire, taillight .....	1
6	800943	Screw, #10-14 x 5/8 .....	4	25	39312-50F01	Wire, noise suppressor (Suzuki Models Only) .....	1
7	837303	Headlight, rectangular .....	2	26	893602	Taillight .....	1
8	843581	Switch, headlight .....	1	27	894531	Harness, ATM controller (Model 898628) .....	1
9	843942	Socket, 12V acc. plug .....	1	28	33410-50F20	Coil, ignition (Suzuki K6A) .....	1
10	886090	Horn .....	1	29	18570-84000	Switch set, vacuum .....	1
11	889673	Solenoid .....	1	30	38850-51F10	Controller, idle up .....	1
12	120052	•Lockwasher, #10 .....	2	31	38850-50F41	Controller, fuel .....	1
13	132520	•Nut, #10-32 .....	2	32	38880-51F13	Controller, auto. trans. ....	1
14	306325	•Lockwasher, 5/16 .....	2	33	33410-85010	Coil, ignition (Suzuki 970) .	1
15	306932	•Nut, 5/16-18 .....	2	34	17680-50F70	Switch, fan .....	1
16	890000	Buzzer assembly .....	1	35	843857	Sender, water temperature .....	1
17	890154	Switch, ignition, complete .....	1	36	829787	Terminal, 45° 1/4" male .....	1
18	837295	•Switch, ignition .....	1				
*	837296	•Connector .....	1				
19	837299	•Spacer .....	1				

• INDENTED PARTS NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.

\* Not Illustrated

# RADIATOR and COOLING SYSTEM



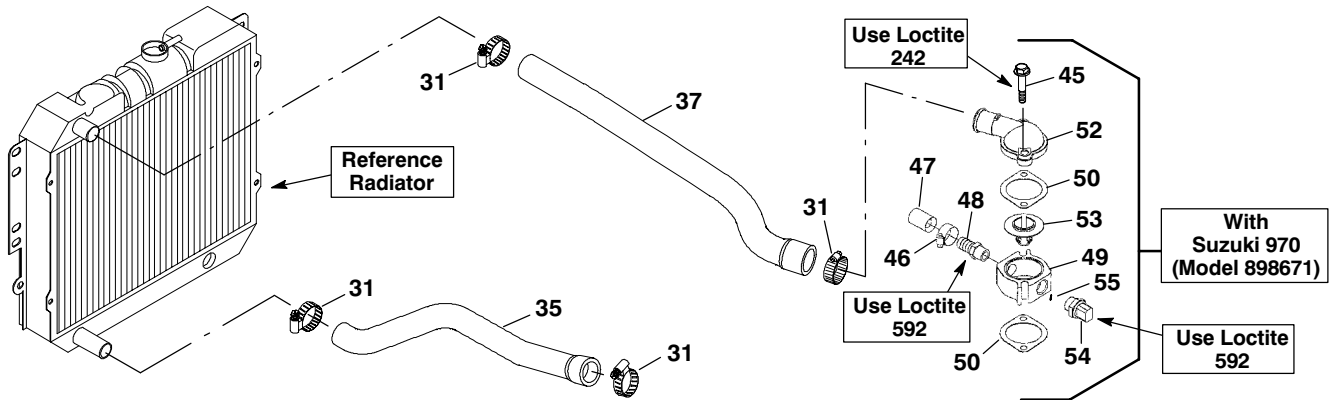
Radiator Hoses for the Suzuki 970 are shown on the following page.

All components shown are used with the Suzuki K6A, 970, and Perkins Diesel engines unless otherwise noted in the parts list shown on the following page.

P893445, P893972, 894614, P894615, 894198, 893594, 893444, 894197



## RADIATOR and COOLING SYSTEM



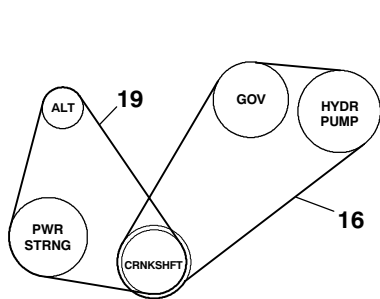
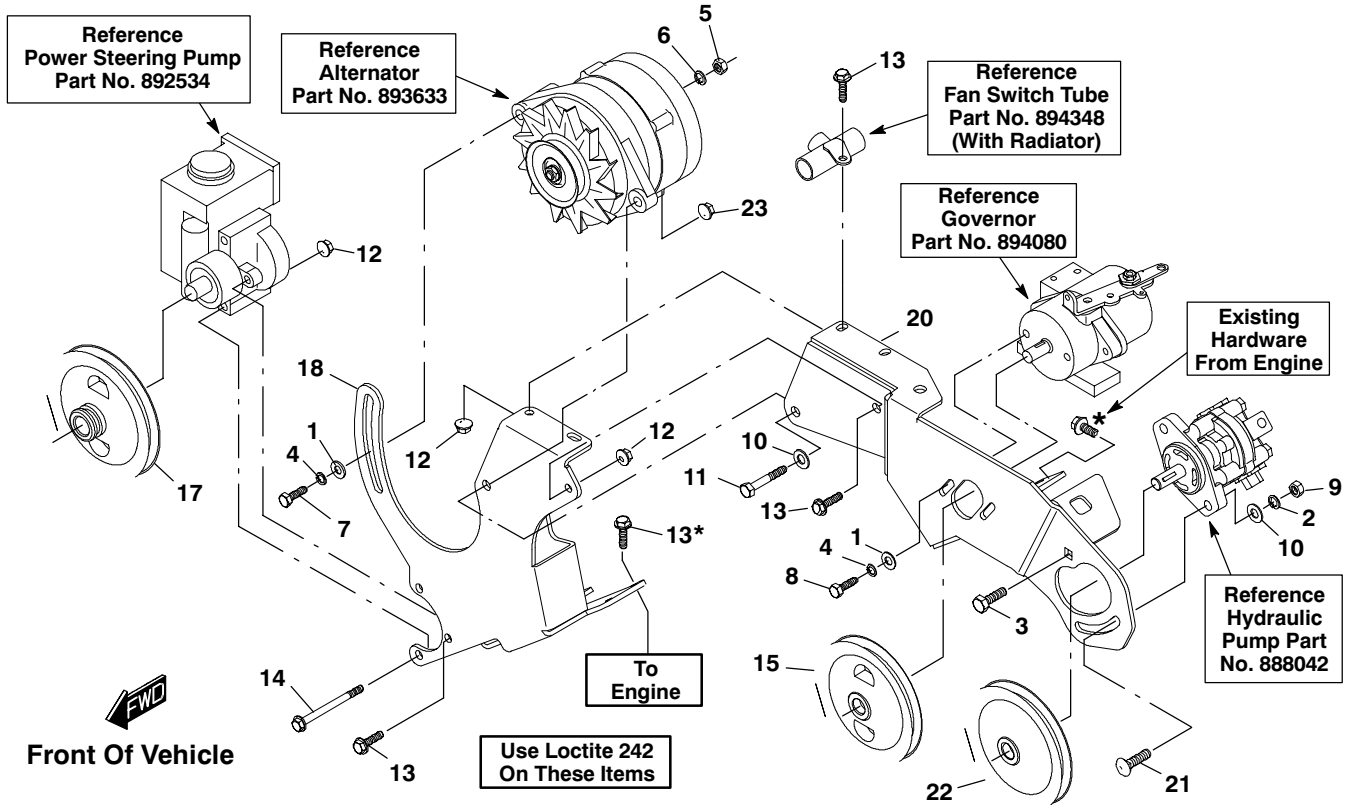
Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	300646	Screw, 1/4-20 x 3/4	2	30	452398	Screw, M10-1.50 x 20 (8.8)	2
2	306396	Lockwasher, 1/4	2	31	820889	Clamp, tubing	6
3	308090	Washer, 1/4	2	32	843857	Sender, water temperature	1
4	450452	Nut, M6-1.00	7	33	843638	Hose, radiator upper (K6A)	1
5	450541	Screw, M6-1.00 x 16	4	34	843639	Hose, radiator (K6A)	1
6	452378	Screw, M6-1.00 x 20	7	35	843646	Hose, radiator lower (K6A & 970)	1
7	835805	Hose, radiator overflow	As Req'd.	36	894348	Tube, fan switch (K6A & Perkins)	1
8	825884	Clamp, tube	3	37	844034	Hose, radiator upper (970)	1
9	809231	Grommet (Model 898671)	2	38	842746	Hose, radiator upper (Perkins)	1
10	800177	Screw, 5/16-18 x 3/4	4	39	829787	Terminal, 45° 1/4" male	1
11	831846	Nut, isolation	4	40	826590	Hose, 5/16 i.d. (Model 898671)	As Req'd.
12	825624	Clamp, hose (Model 898671)	4	41	838340	Cooler, oil (automatic transmission)	1
13	889051	Cap, coolant reservoir	1	42	821893	Trim, push-on (Model 898671)	As Req'd.
14	833512	Foam	2	43	844391	Hose, radiator lower (Perkins)	1
15	800789	Kit, oil cooler mounting, automatic transmission (Model 898671)	1	44	844390	Hose, radiator (Perkins)	1
16	840754	Decal, Warning Pressure	1	45	452393	Screw, M8-1.25 x 60 (8.8)	2
17	843040	Bracket, fan mounting	1	46	832033	Clamp (970)	1
18	888549	Connector, hose (air cleaner)	1	47	833715	Plug (970)	1
19	894590	Radiator	1	48	833858	Fitting, hose (970)	1
20	833443	•Plug	1	49	843738	Housing, fan sender (970)	1
21	889049	•Cap, radiator	1	50	843856	Gasket, fan switch housing (970)	2
22	833442	•O-ring	1	51	009034880	Decal, fan	1
23	889050	Reservoir, coolant	1	52	17561-73000	Cap, water (970)	1
24	893388	Mount, radiator	1	53	17600-85831	Thermostat (970)	1
25	893554	Screen	1	54	17680-50F70	Switch, fan	1
26	2700799	Fan, radiator, cooling	1	55	17689-50F00	•O-ring	1
27	450453	Nut, M8-1.25 (G10.9)	2				
28	452388	Screw, M8-1.25 x 20 (8.8)	1				
29	452395	Screw, M10-1.50 x 80 (8.8)	1				

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

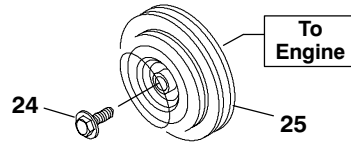
◇ The parts illustration only shows two (2) of Item 12 (825624 Hose Clamps). The other two are used to secure the cooler hoses to the transmission lines.

◆ Not Illustrated. Item 42 (821893 Push-on Trim) is used on Model 898671 to protect the automatic transmission hoses and is used on the right side motor mount and the frame rail.

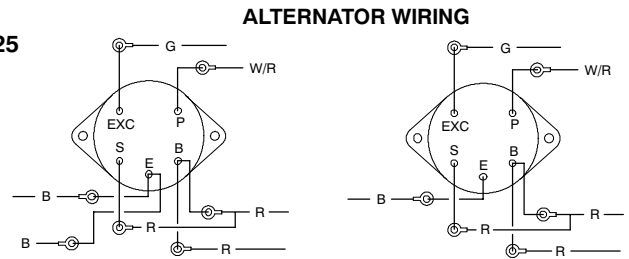
## ALTERNATOR, ENGINE BELTS, PULLEYS and BRACKETS (SUZUKI K6A)



**Engine Belt Diagram**  
Models 898627 & 898628



894588, 894507

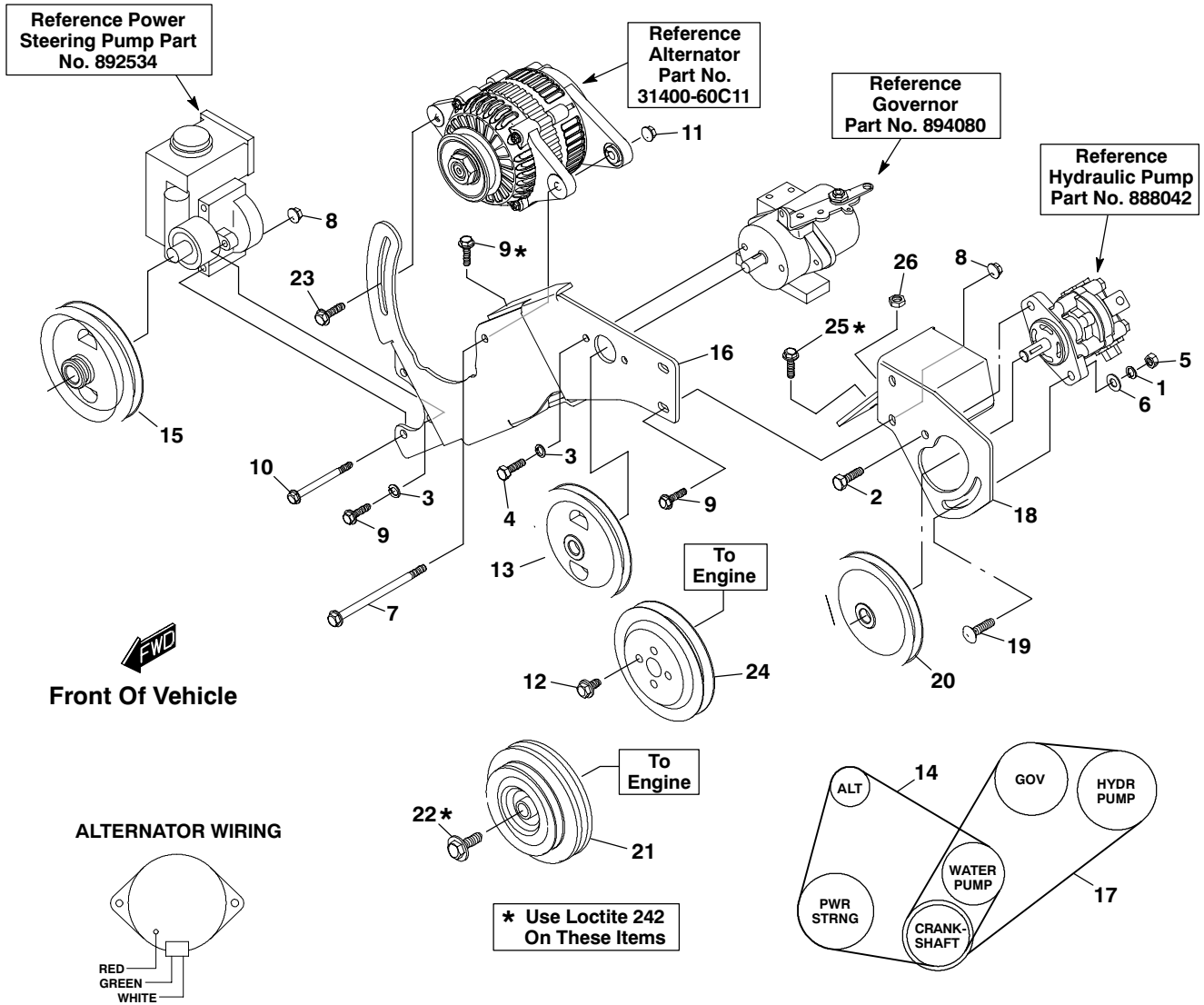


MODEL 898627

MODEL 898628

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	103867	Washer, 3/8	3	15	844035	Pulley, 4.75" (governor)	1
2	120177	Lockwasher, 3/8	2	16	841027	V-belt, 53 1/4" (1352 mm)	1
3	306835	Screw, 3/8-16 x 1 3/4	1	17	839907	Pulley, 5.50" (steering pump)	1
4	306325	Lockwasher, 5/16	3	18	2703818.7	Bracket, alternator mounting	1
5	306375	Nut, 1/4-20	1	19	843998	V-belt, 40" (1016 mm)	1
6	306396	Lockwasher, 1/4	1	20	894375	Bracket, governor mounting	1
7	306416	Screw, 5/16-18 x 1	1	21	800073	Bolt, carriage, 3/8-16 x 1 1/4	1
8	306450	Screw, 5/16-18 x 3/4	2	22	828100	Pulley, 5.50" (hydraulic pump)	1
9	306562	Nut, 3/8-16	2	23	548804	Nut, 3/8-16	1
10	306981	Washer, 3/8	3	24	12619-60B00	Bolt	1
11	311213	Screw, 3/8-16 x 3	1	25	95131-51F60	Pulley, crankshaft (manual transmission)	1
12	450453	Nut, M8-1.25 (G10.9)	5		95131-51F50	Pulley, crankshaft (automatic transmission)	1
13	452388	Screw, M8-1.25 x 20 (8.8)	8				
14	452394	Screw, M8-1.25 x 70 (8.8)	2				

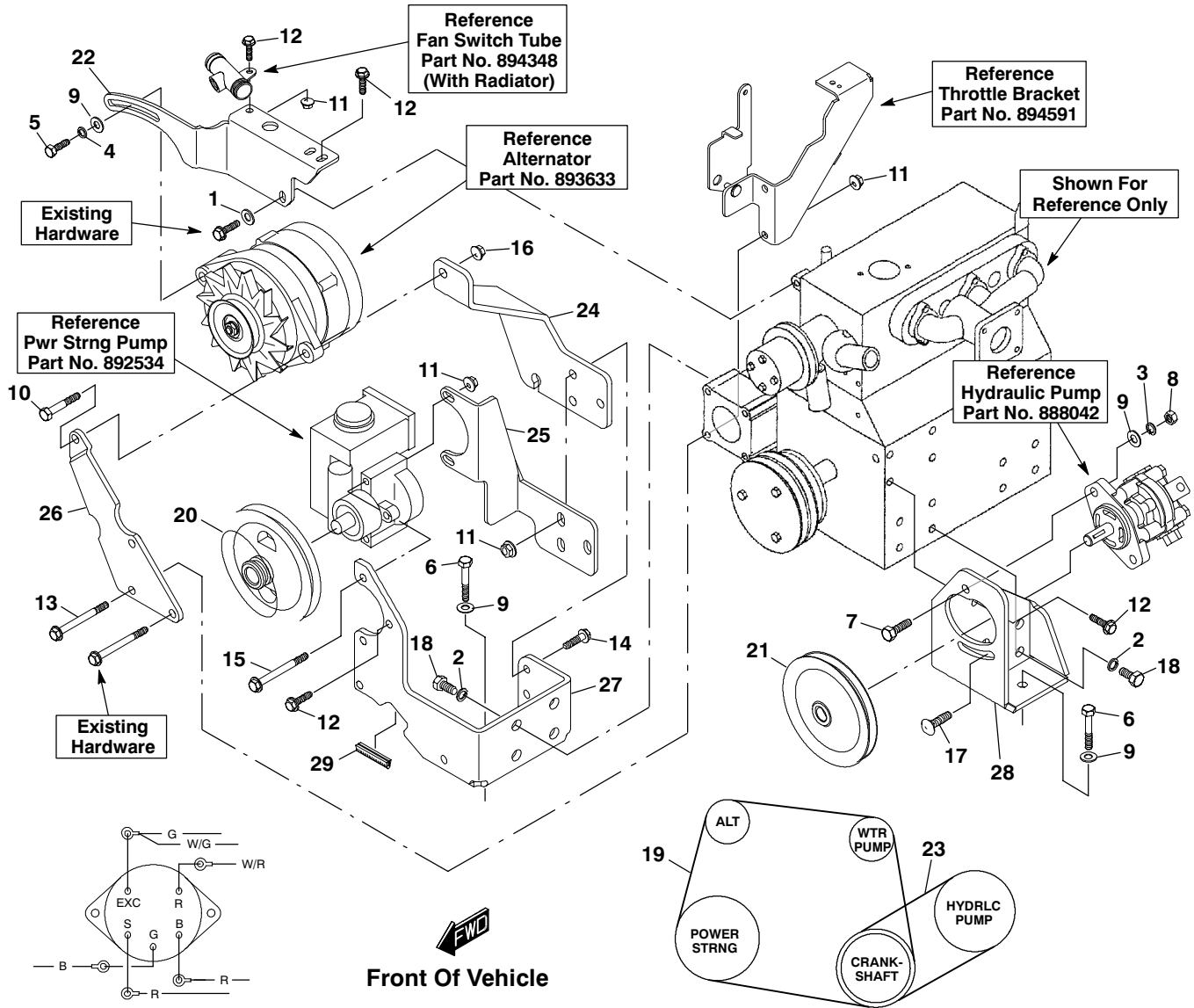
## ALTERNATOR, ENGINE BELTS, PULLEYS and BRACKETS (SUZUKI 970)



894197

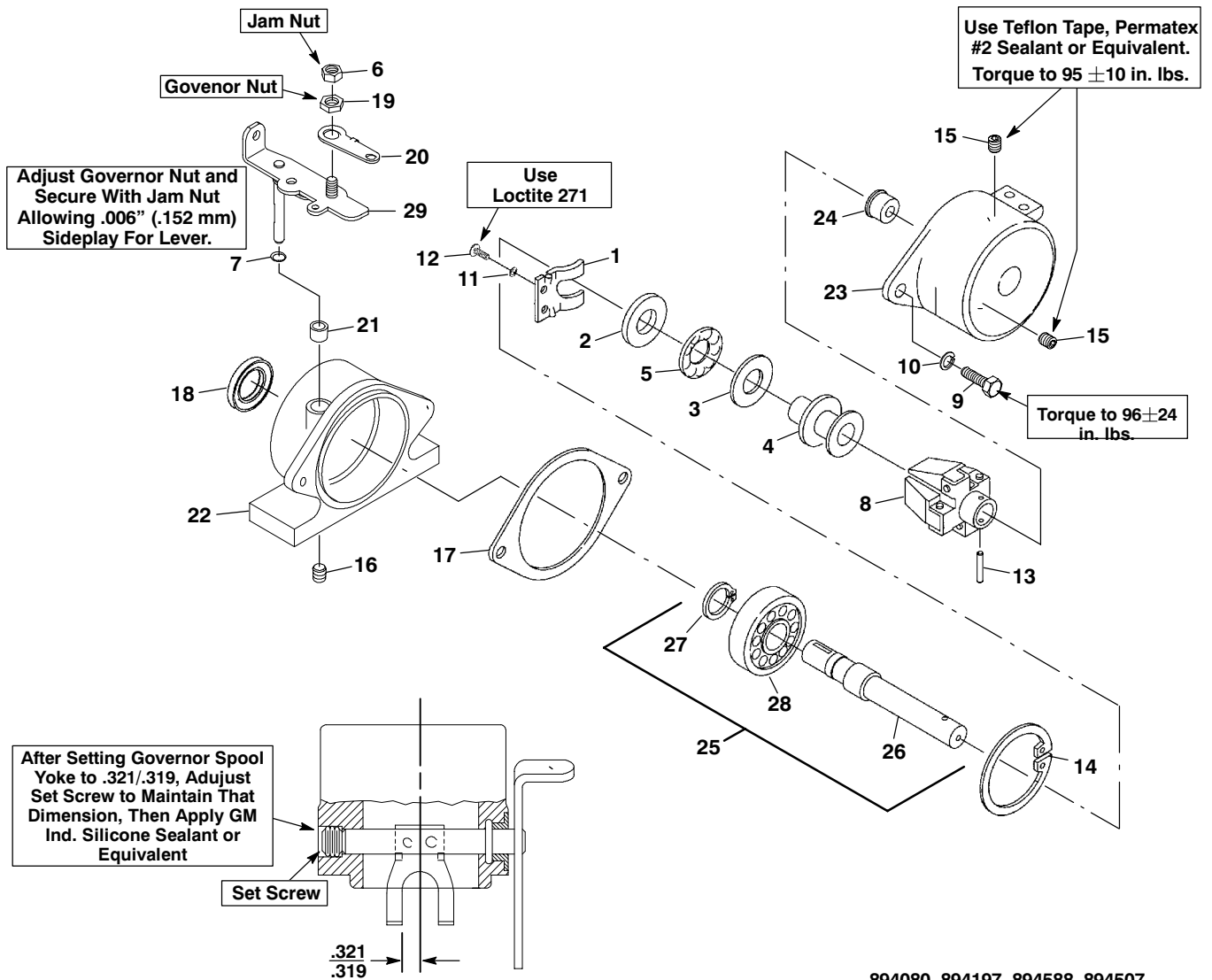
Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	120177	Lockwasher, 3/8	2	15	839907	Pulley, 5.50" (steering pump)	1
2	306835	Screw, 3/8-16 x 1 3/4	1	16	894362	Bracket, alternator, governor and power steering pump	1
3	306325	Lockwasher, 5/16	3	17	844036	V-belt, 51" (1295 mm)	1
4	306450	Screw, 5/16-18 x 3/4	2	18	843702	Bracket, hydraulic pump	1
5	306932	Nut, 5/16-18	2	19	800073	Bolt, carriage, 3/8-16 x 1 1/4	1
6	306981	Washer, 3/8	2	20	828100	Pulley, 5.50" (hydraulic pump)	1
7	316909	Screw, 5/16-18 x 4 1/2	1	21	95131-51F60	Pulley, double groove	1
8	450453	Nut, M8-1.25 (G10.9)	4	22	12619-60B00	Bolt, crankshaft	1
9	452388	Screw, M8-1.25 x 20 (8.8)	7	23	09118-08107	Bolt	1
10	452394	Screw, M8-1.25 x 70 (8.8)	2	24	17511-73001	Pulley, water pump	1
11	800697	Nut, crownlock 5/16-18	1	25	452389	Screw, M8-1.25 x 25 (8.8)	1
12	800950	Screw, M6-1.00 x 10	4	26	08316-10083	Nut	1
13	844035	Pulley, 4.75" (governor)	1				
14	836854	V-belt, 42" (1067 mm)	1				

## ALTERNATOR, ENGINE BELTS, PULLEYS and BRACKETS (DIESEL)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	103867	Washer, 3/8	1	16	548804	Nut, flange 3/8-16	1
2	120166	Lockwasher, 1/2	8	17	800073	Bolt, carriage 3/8-16 x 1 1/4	1
3	120177	Lockwasher, 3/8	2	18	800921	Screw, M12-1.25 x 20 (8.8)	2
4	306325	Lockwasher, 5/16	1	19	844301	V-belt, 48" (1219 mm)	1
5	306416	Screw, 5/16-18 x 1	1	20	839907	Pulley, 5.50" (steering pump)	1
6	306836	Screw, 3/8-16 x 2 1/4	2	21	839911	Pulley, 4.75" (hydraulic pump)	1
7	306835	Screw, 3/8-16 x 1 1/4	1	22	844269	Bracket, alternator adjusment	1
8	306562	Nut, 3/8-16	2	23	841966	V-belt, 29.5" (750 mm)	1
9	306981	Washer, 3/8	5	24	844271	Bracket, alternator rear	1
10	311213	Screw, 3/8-16 x 3	1	25	844268	Bracket, power steering, rear	1
11	450453	Nut, M8-1.25 (G10.9)	8	26	844270	Bracket, alternator, front	1
12	452388	Screw, M8-1.25 x 20 (8.8)	5	27	844272	Mount, engine (right)	1
13	452394	Screw, M8-1.25 x 70 (8.8)	2	28	843760	Bracket, hydraulic pump	1
14	452390	Screw, M8-1.25 x 30 (8.8)	3	29	821893	Trim, push-on	As Req'd.
15	452395	Screw, M8-1.25 x 80 (8.8)	2				

# GOVERNOR (SUZUKI K6A and 970)

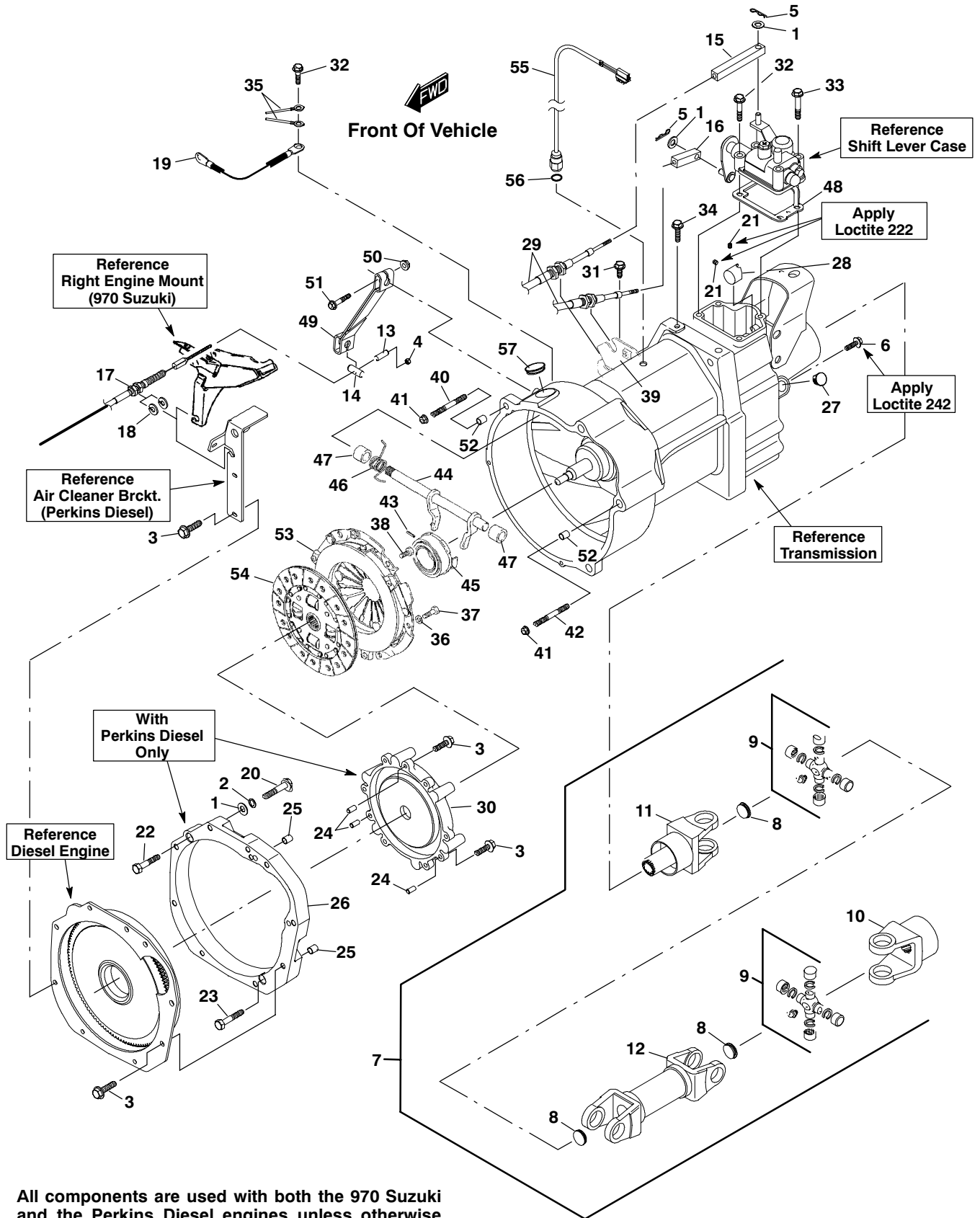


894080, 894197, 894588, 894507

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
	894080	Governor, complete	1	15	800227	•Plug, 1/8-27	2
1	111812	•Yoke, spool	1	16	800558	•Screw, set, 3/8-16 x 5/16"	1
2	111814	•Washer, thrust	1	17	833056	•Gasket, governor	1
3	111816	•Washer, thrust	1	18	833102	•Seal, oil	1
4	111817	•Spool, governor	1	19	835271	•Nut, governor arm	1
5	112840	•Bearing, thrust	1	20	843537	•Bracket, governor knee	1
6	130728	•Nut, jam, 1/4-20	1	21	843149	•Bushing, steel	1
7	158061-18	•O-ring	1	22	843157	•Head, governor	1
8	160410	•Carrier & weights	1	23	894471	•Reservoir, governor	1
9	302288	•Screw, 1/4-20 x 1"	2	24	833103	••Bearing, needle	1
10	306396	•Lockwasher, 1/4"	2	25	888397	•Shaft, governor, complete	1
11	306506	•Lockwasher, #6	2	26	833066	••Shaft, governor	1
12	306915	•Screw, machine, #6-32 x 5/16"	2	27	833104	••Ring, retaining	1
13	306966	•Pin, roll, 1/8" x 3/4"	1	28	833345	••Bearing, ball	1
14	548325	•Ring, retaining	1	29	894067	•Lever, governor control	1

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

# DRIVE SHAFT, CLUTCH and TRANSMISSION SHIFTER LINKAGE (PERKINS DIESEL and SUZUKI 970)



All components are used with both the 970 Suzuki and the Perkins Diesel engines unless otherwise noted in the parts list shown on the following page.

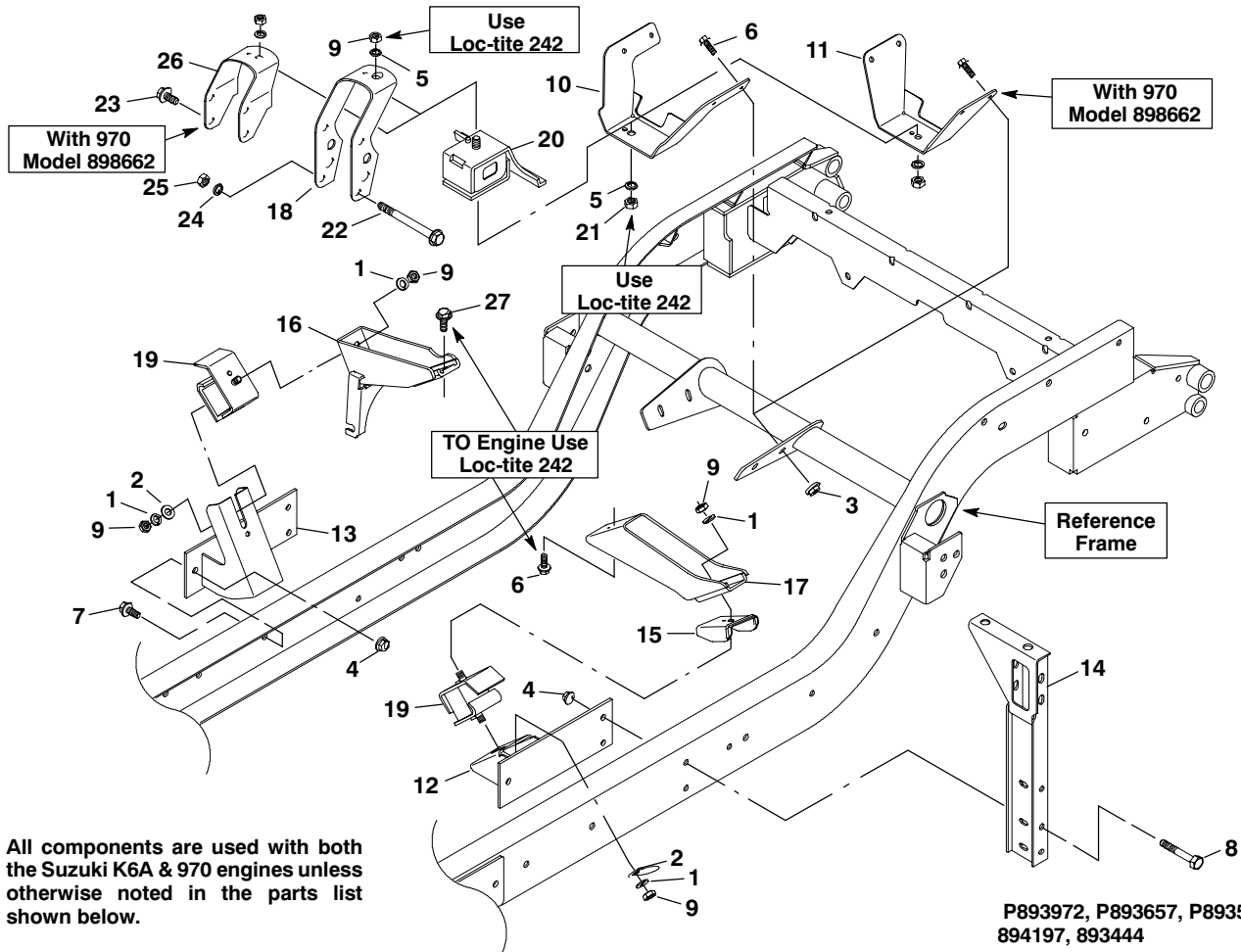
894197, 893444, 894198, 893594

**DRIVE SHAFT, CLUTCH and TRANSMISSION SHIFTER LINKAGE  
(PERKINS DIESEL and SUZUKI 970)**

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	103867	Washer, 5/16	4	30	894645	Ring, pressure plate (Perkins)	1
2	306325	Lockwasher, 5/16	2	31	01550-08803	Screw	1
3	452389	Screw, M8-1.25 x 25 (8.8)	11	32	01550-08403	Screw	4
4	450377	Nut, nylock M6-1.00 (8.8)	1	33	01550-08553	Screw	1
5	548190	Hairpin	2	34	09103-08131	Screw	1
6	800934	Screw, M6-1.00 x 16 (8.8)	1	35	39312-50F01	Wire, noise suppressor	2
7	894272	Driveshaft, complete	1	36	08321-01083	Lockwasher	2
8	548482	•Plug, expansion	3	37	09111-08035	Screw	2
9	826284	•Cross, u-joint	2	38	09117-08096	Screw	4
10	826285	•Yoke, universal	1	39	28391-85202	Bracket, shift cables	1
11	894432	•Yoke, front	1	40	01421-10403	Stud	1
12	894433	•Shaft, drive	1	41	08316-10103	Nut	2
13	833273	Bushing	1	42	01421-10503	Stud	1
14	842010	Bushing, clutch arm	1	43	09205-03019	Pin, roll	1
15	843830	Connector, shift cable	1	44	23260-85203	Shaft, clutch release	1
16	843778	Connector, shift cable	1	45	23265-85200	Bearing, clutch release	1
17	894299	Cable, clutch	1	46	09448-20007	Spring, clutch release	1
18	844202	Washer, slotted	4	47	09300-14017	Bushing, clutch release	2
19	892811	Wire, ground, black 24" (610 mm)	1	48	845223	Gasket, shifter case	1
20	452392	Screw, M8-1.25 x 50 (8.8)	2	49	23266-85002	Arm, clutch release	1
21	548222	Set screw, #8-32	2	50	08316-10083	Nut	1
22	800948	Screw, M10-1.25 x 35 (12.9)	1	51	01550-08353	Screw	1
23	800949	Screw, M10-1.25 x 50 (12.9)	1	52	04211-13149	Sleeve, alignment	2
24	839752	Pin, dowel, 8 mm x 18 mm	3	53	22100-85200	Cover assembly, clutch	1
25	842961	Sleeve, alignment	2	54	22400-85141	Disc, compression clutch	1
26	843323	Adapter, transmission (Perkins)	1	55	37610-80023	Switch, backup lamp	1
27	843754	Plug	1	56	09280-11002	•O-ring	1
28	844228	Stop, 5th gear lockout	1	57	09250-30003	Plug, transmission inspection timing	1
29	894179	Cable, shifter	2				

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

## ENGINE and TRANSMISSION MOUNTS (SUZUKI K6A and 970)



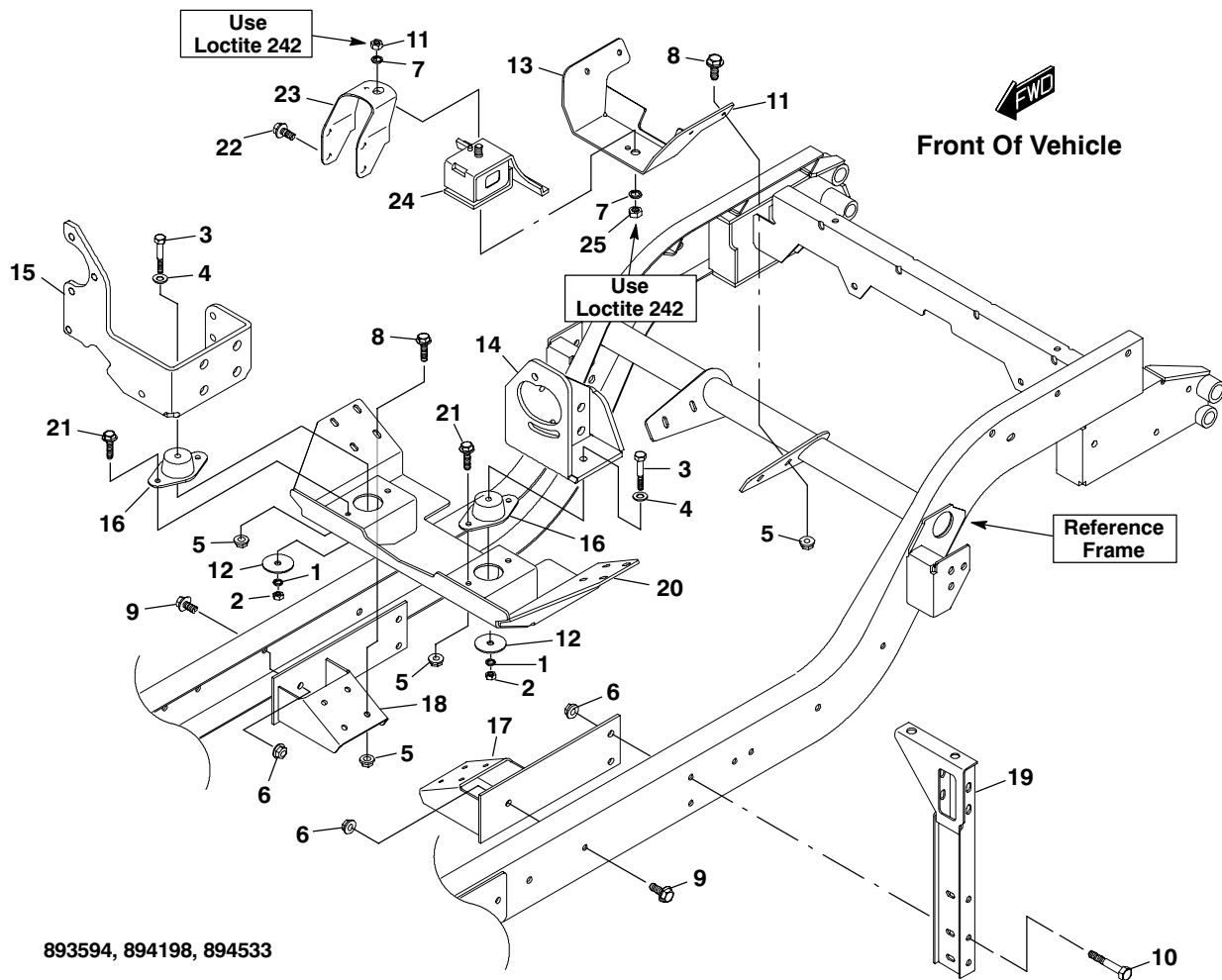
All components are used with both the Suzuki K6A & 970 engines unless otherwise noted in the parts list shown below.

P893972, P893657, P893595  
894197, 893444

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	303269	Lockwasher, 7/16	4	15	11616-85000	Cover, engine mount	1
2	306982	Washer, 7/16	2	16	11640-53F20	Support, engine (right) (Suzuki K6A)	1
3	450453	Nut, M8-1.25 (G10.9)	6		11640-85201	Support, engine (right) (Suzuki 970)	1
4	452454	Nut, M10-1.50 (10.9)	6	17	11650-85561	Support, engine (left) (Suzuki K6A)	1
5	450412	Lockwasher, M10	2		11650-85550	Support, engine (left) (Suzuki 970)	1
6	452389	Screw, M8-1.25 x 25 (8.8)	4	18	11741-85510	Support, transmission, automatic trans. (K6A)	1
7	452398	Screw, M10-1.50 x 20 (8.8)	2		11741-85000	Support, transmission, manual trans. (K6A)	1
8	452406	Screw, M10-1.50 x 90 (8.8)	4	19	11610-60C01	Mount, engine (front)	2
9	800571	Nut, M10-1.25 (8.8)	5	20	11710-77100	Bracket, rear mount	1
10	843444	Bracket, transmission to frame (Suzuki K6A)	1	21	08310-00103	Nut	1
11	843530	Bracket, transmission to frame (Suzuki 970)	1	22	01500-08953	Screw (K6A)	2
12	894009	Mount assembly, motor (left) (Suzuki K6A)	1	23	01550-08163	Screw (970)	4
	894293	Mount assembly, motor (left) (Suzuki 970)	1	24	08321-01083	Lockwasher (K6A)	2
13	894010	Mount assembly, motor, right (Suzuki K6A)	1	25	08310-00083	Nut (K6A)	2
	894292	Mount assembly, motor, right (Suzuki 970)	1	26	11741-85200	Support, transmission (970)	1
14	893525	Support, platform	2	27	01550-10203	Bolt (K6A eng. mount)	3



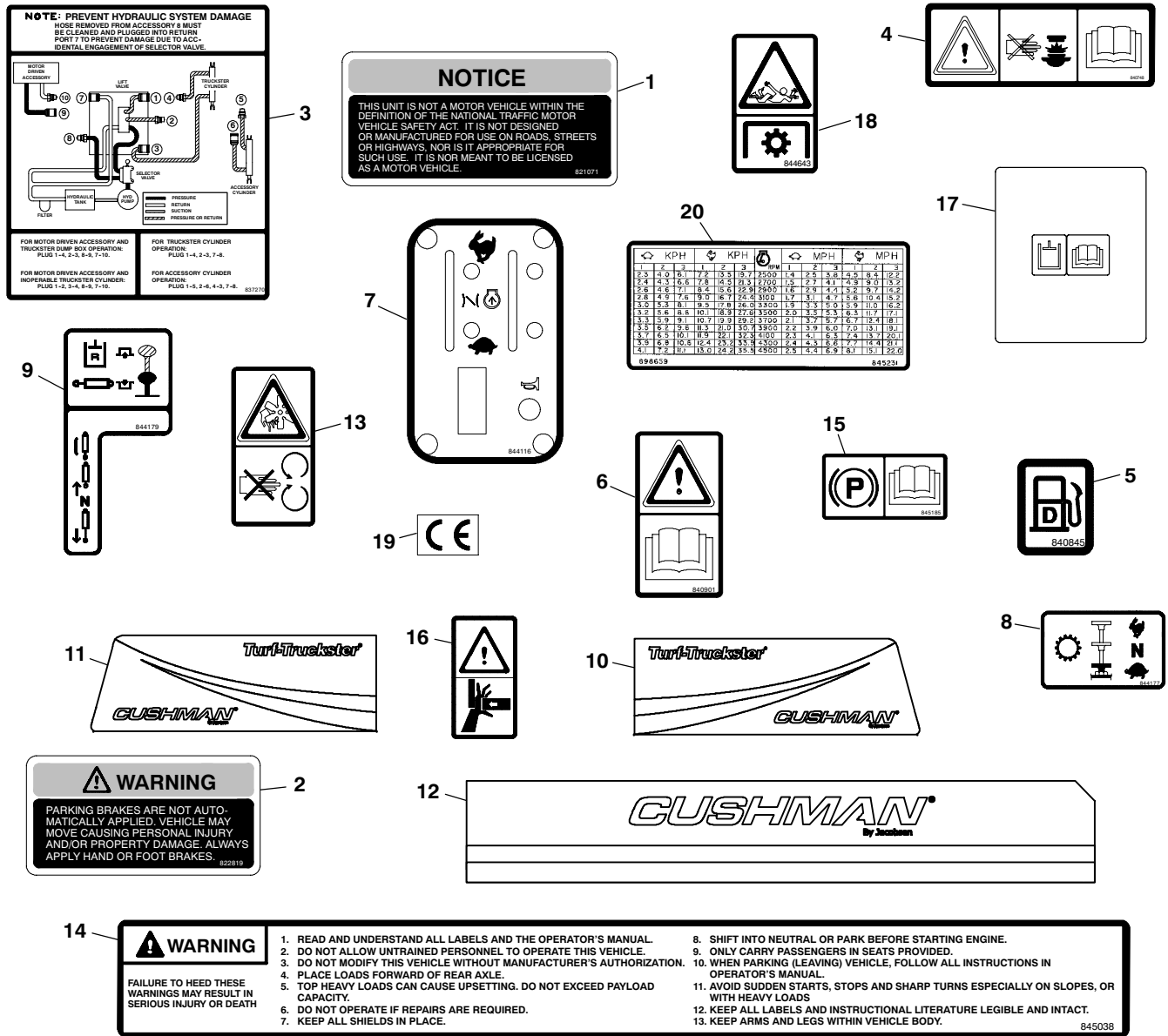
## ENGINE and TRANSMISSION MOUNTS (DIESEL)



893594, 894198, 894533

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	120177	Lockwasher, 3/8	2	14	843760	Mount, hydraulic pump	1
2	306562	Nut, 3/8-16	2	15	844272	Mount, engine (right)	1
3	306836	Screw, 3/8-16 x 2 1/4	2	16	841885	Mount, isolation	2
4	306981	Washer, 3/8	2	17	894581	Mount, motor (left)	1
5	450453	Nut, M8-1.25 (G10.9)	16	18	894582	Mount, motor (right)	1
6	452454	Nut, M10-1.50 (10.9)	6	19	893525	Support, platform	2
7	450412	Lockwasher, M10	2	20	894580	Frame, engine mount	1
8	452389	Screw, M8-1.25 x 25 (8.8)	12	21	452388	Screw, M8-1.25 x 20 (8.8)	4
9	452398	Screw, M10-1.50 x 20 (8.8)	2	22	01550-08163	Screw	4
10	452406	Screw, M10-1.50 x 90 (8.8)	4	23	11741-85200	Support, transmission	1
11	800571	Nut, M10-1.25 (8.8)	1	24	11710-77100	Bracket, rear mount	1
12	809174	Washer, 3/8 (1.94" dia.)	1	25	08310-00103	Nut	1
13	843568	Mount, transmission	1				

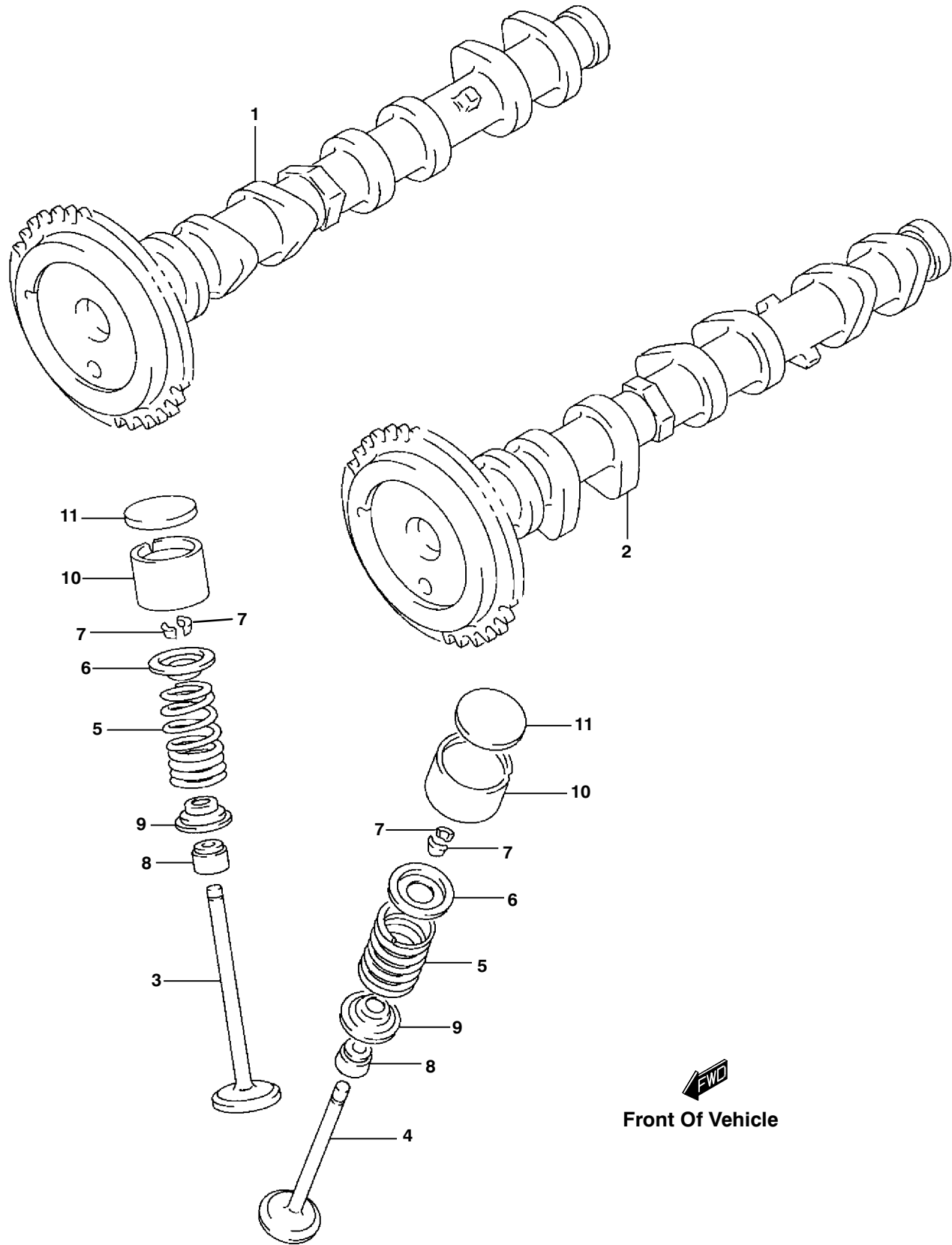
## DECALS (TURF MODELS)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	821071	Decal, Notice not motor vehicle	1	13	009034880	Decal, Warning, fan	1
2	822819	Decal, Warning, park brake	1	14	845038	Decal, Vehicle Operation	1
3	837270	Decal, remote hyd. connections	1	15	845185	Decal, Park brake CE	1
4	840754	Decal, Warning, pressure	1	16	845027	Decal, Pinch point	As Req'd.
5	840845	Decal, diesel fuel only	1	17	840857	Decal, Remote hydraulics CE	1
6	840901	Decal, Warning, read ops. man.	1	18	844643	Decal, Warning, pto	1
7	844116	Decal, LH dash, turf	1	19	009039290	Decal, CE	1
8	844177	Decal, aux. transmission	1	20	845231	Decal, ground speed (K6A A)	1
9	844179	Decal, hydraulic controls	1	*	845232	Decal, ground speed (K6A M)	1
10	74792	Decal, turf LH	1	*	845233	Decal, ground speed (970)	1
11	74766	Decal, turf RH	1	*	845234	Decal, ground speed (diesel)	1
12	74764	Decal, Cushman-Textron	1				

\* Not illustrated

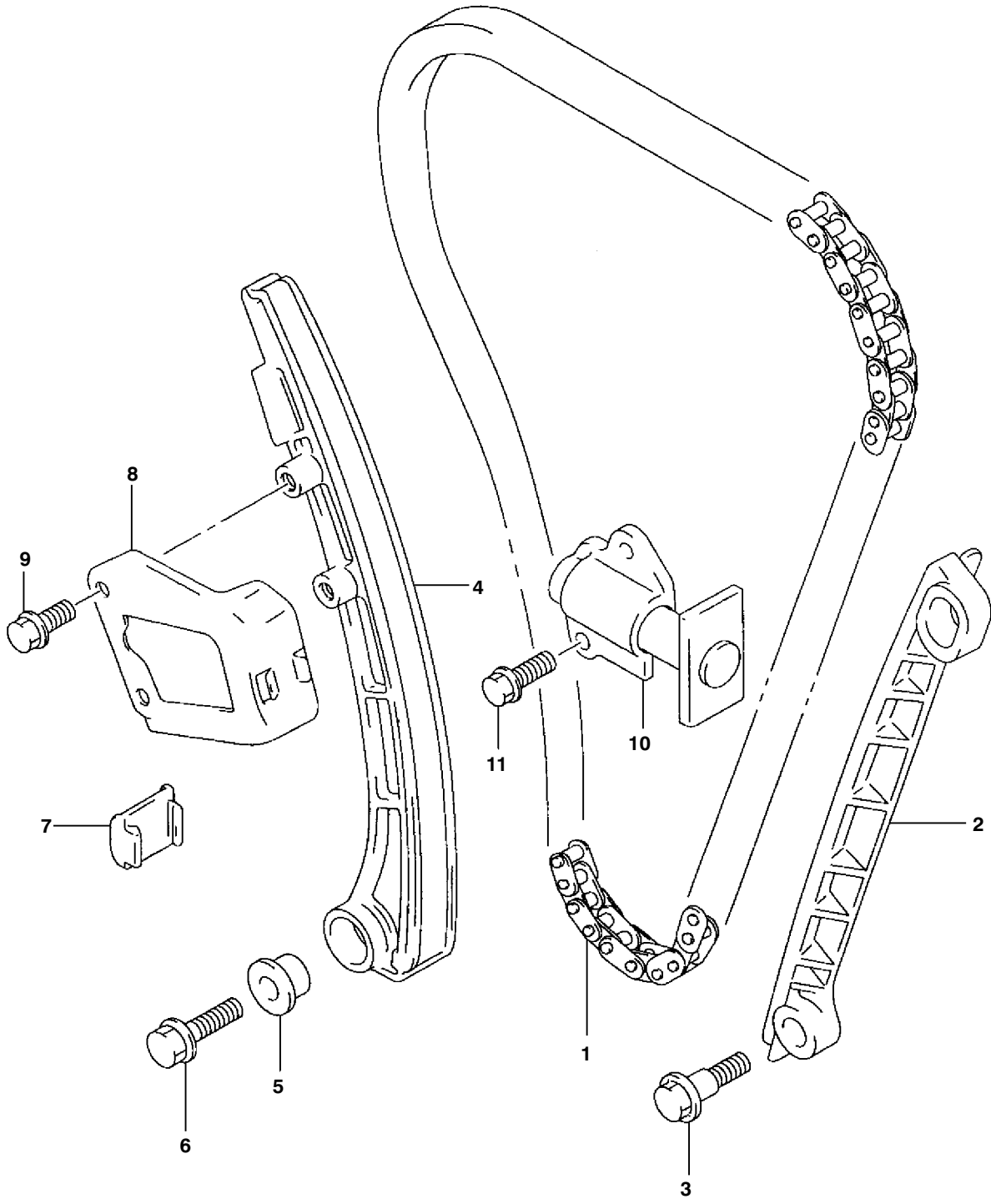
# CAMSHAFT and COMPONENTS (SUZUKI K6A)



## CAMSHAFT and COMPONENTS (SUZUKI K6A)

Ref. No.	Part No.	Description	No. Req'd	Notes
1	4120030	Camshaft, intake .....	1	
2	4120031	Camshaft, exhaust .....	1	
3	4120032	Valve, intake .....	6	
4	4120033	Valve, exhaust .....	6	
5	4120034	Spring, valve .....	12	
6	4120035	Retainer, spring .....	12	
7	2701970	Cotter, valve .....	24	
8	2701972	Seal, valve stem oil .....	12	
9	2701971	Seat, spring .....	12	
10	4119911	Tappet .....	12	
11	4119912	Shim, tappet .....	As Req'd	T:2.18
	4119913	Shim, tappet .....	As Req'd	T:2.20
	4119914	Shim, tappet .....	As Req'd	T:2.22
	4119915	Shim, tappet .....	As Req'd	T:2.24
	4119916	Shim, tappet .....	As Req'd	T:2.26
	4119917	Shim, tappet .....	As Req'd	T:2.28
	4119918	Shim, tappet .....	As Req'd	T:2.30
	4119919	Shim, tappet .....	As Req'd	T:2.32
	4119920	Shim, tappet .....	As Req'd	T:2.34
	4119921	Shim, tappet .....	As Req'd	T:2.36
	4119922	Shim, tappet .....	As Req'd	T:2.38
	4119923	Shim, tappet .....	As Req'd	T:2.40
	4119924	Shim, tappet .....	As Req'd	T:2.42
	4119925	Shim, tappet .....	As Req'd	T:2.44
	4119926	Shim, tappet .....	As Req'd	T:2.46
	4119927	Shim, tappet .....	As Req'd	T:2.48
	4119928	Shim, tappet .....	As Req'd	T:2.50
	4119929	Shim, tappet .....	As Req'd	T:2.52
	4119930	Shim, tappet .....	As Req'd	T:2.46
	4119931	Shim, tappet .....	As Req'd	T:2.46
	4119932	Shim, tappet .....	As Req'd	T:2.46
	4119933	Shim, tappet .....	As Req'd	T:2.46
	4119934	Shim, tappet .....	As Req'd	T:2.46
	4119935	Shim, tappet .....	As Req'd	T:2.46
	4119936	Shim, tappet .....	As Req'd	T:2.46
	4119937	Shim, tappet .....	As Req'd	T:2.46
	4119938	Shim, tappet .....	As Req'd	T:2.46
	4119939	Shim, tappet .....	As Req'd	T:2.46
	4119940	Shim, tappet .....	As Req'd	T:2.46
	4119941	Shim, tappet .....	As Req'd	T:2.46
	4119942	Shim, tappet .....	As Req'd	T:2.46
	4119943	Shim, tappet .....	As Req'd	T:2.46
	4119944	Shim, tappet .....	As Req'd	T:2.46
	4119945	Shim, tappet .....	As Req'd	T:2.46
	4119946	Shim, tappet .....	As Req'd	T:2.46
	4119947	Shim, tappet .....	As Req'd	T:2.46
	4119948	Shim, tappet .....	As Req'd	T:2.46
	4119949	Shim, tappet .....	As Req'd	T:2.46
	4119950	Shim, tappet .....	As Req'd	T:2.46
	4119951	Shim, tappet .....	As Req'd	T:2.46
	4119952	Shim, tappet .....	As Req'd	T:2.46
	4119953	Shim, tappet .....	As Req'd	T:2.46

CAM CHAIN (SUZUKI K6A)

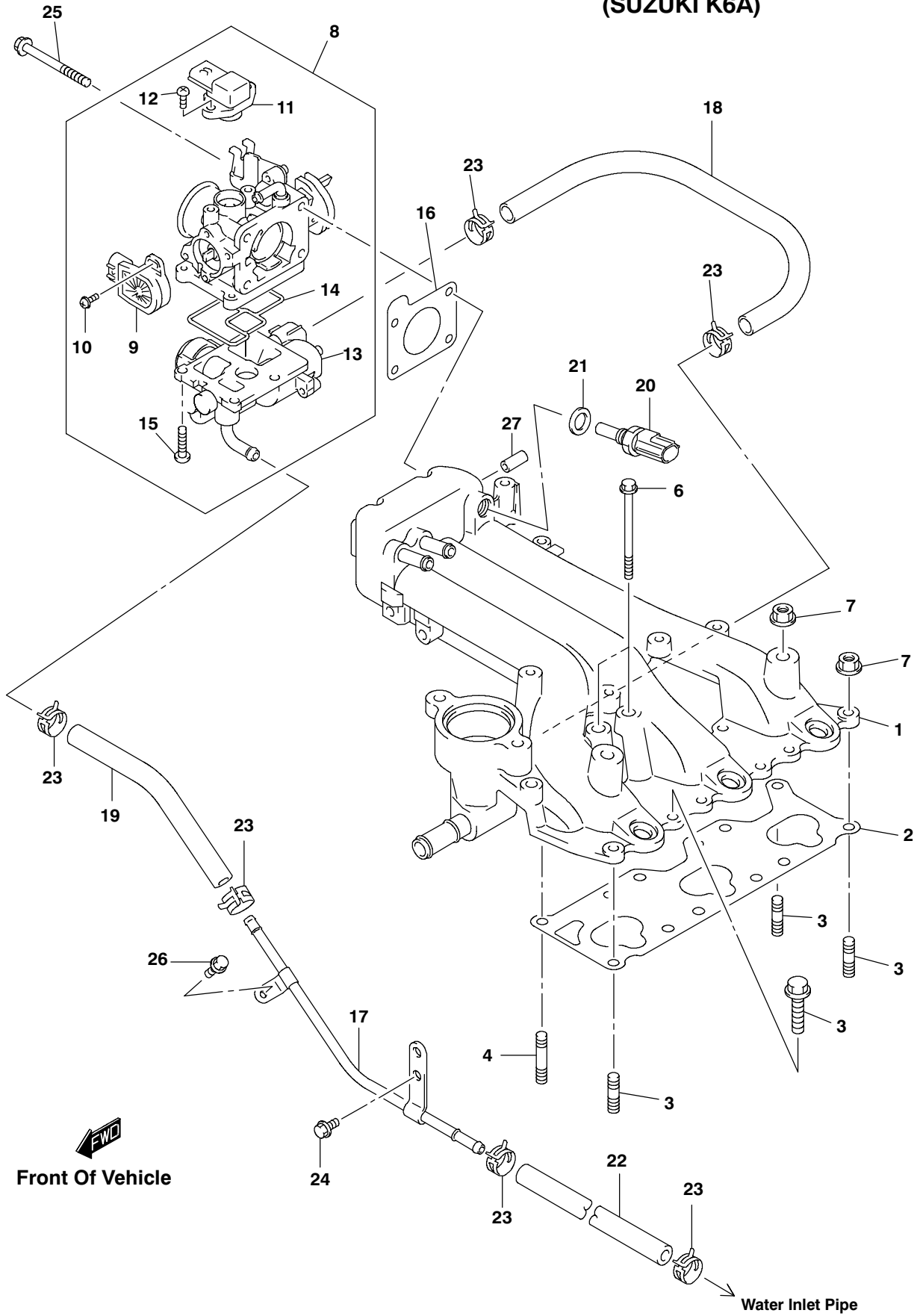


Front Of Vehicle

## CAM CHAIN (SUZUKI K6A)

Ref. No.	Part No.	Description	No. Req'd	Notes
1	4120037	Chain, timing .....	1	
2	4120038	Guide, chain .....	1	
3	4120039	Bolt .....	2	
4	4120040	Tensioner, chain .....	1	
5	4120041	Spacer .....	1	
6	2702469	Bolt .....	1	
7	4120042	Pad, tensioner .....	1	
8	4120043	Link, tensioner .....	1	
9	2702486	Bolt .....	2	
10	4120044	Adjuster, tensioner .....	1	
11	2701834	Bolt .....	2	

# CARBURETOR and INTAKE MANIFOLD (SUZUKI K6A)



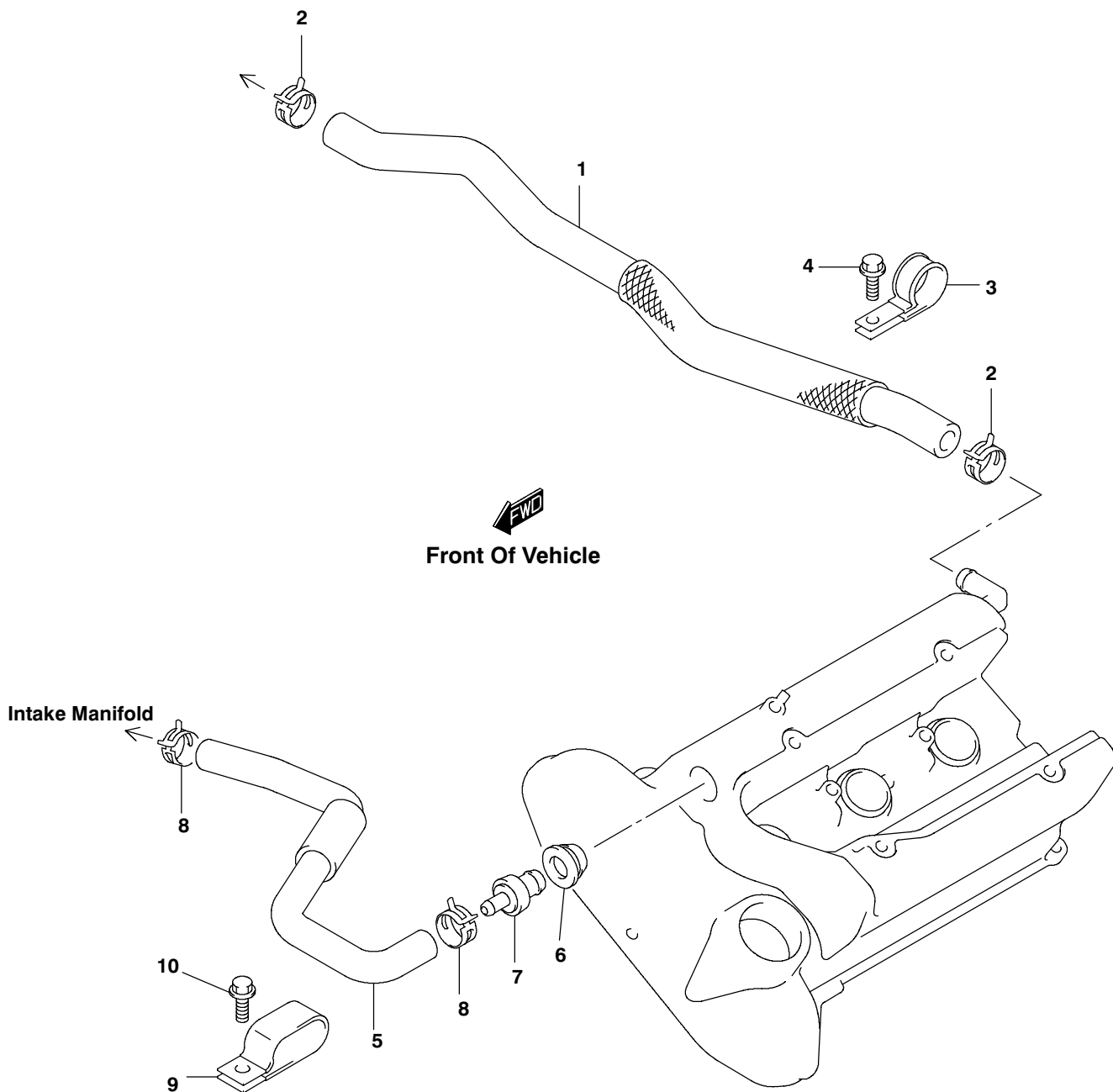
**CARBURETOR and INTAKE MANIFOLD  
(SUZUKI K6A)**

Ref. No.	Part No.	Description	No. Req'd	Notes
1	4120045	Manifold, intake .....	1	
2	4119959	Gasket .....	1	
3	2702523	Stud bolt .....	3	
4	4120047	Stud bolt .....	1	
5	2701834	Bolt .....	6	
6	4120048	Bolt .....	2	
7	2701914	Nut .....	4	
8	4120049	Body, throttle .....	1	
9	2701995	•Sensor, throttle position .....	1	
10	2701996	•Screw .....	2	
11	2702477	•Sensor, pressure .....	1	
12	2701998	•Screw .....	6	
13	2701999	•Valve, ISC .....	1	
14	2702000	•Gasket .....	1	
15	2701998	•Screw .....	4	
16	2701803	Gasket .....	1	
17	4120025	Hose, water .....	1	
18	4120050	Hose, water throttle inlet .....	1	
19	4116846	Hose, water .....	1	
20	4120051	Sensor, inlet air temperature .....	1	
21	4120052	Gasket .....	1	
22	4120100	Hose, water .....	1	
23	2702429	Clip .....	2	
24	2702486	Bolt .....	1	
25	2702001	Bolt, throttle body .....	4	
26	2702475	Bolt .....	1	
27	2702431	Plug .....	1	

•INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY.

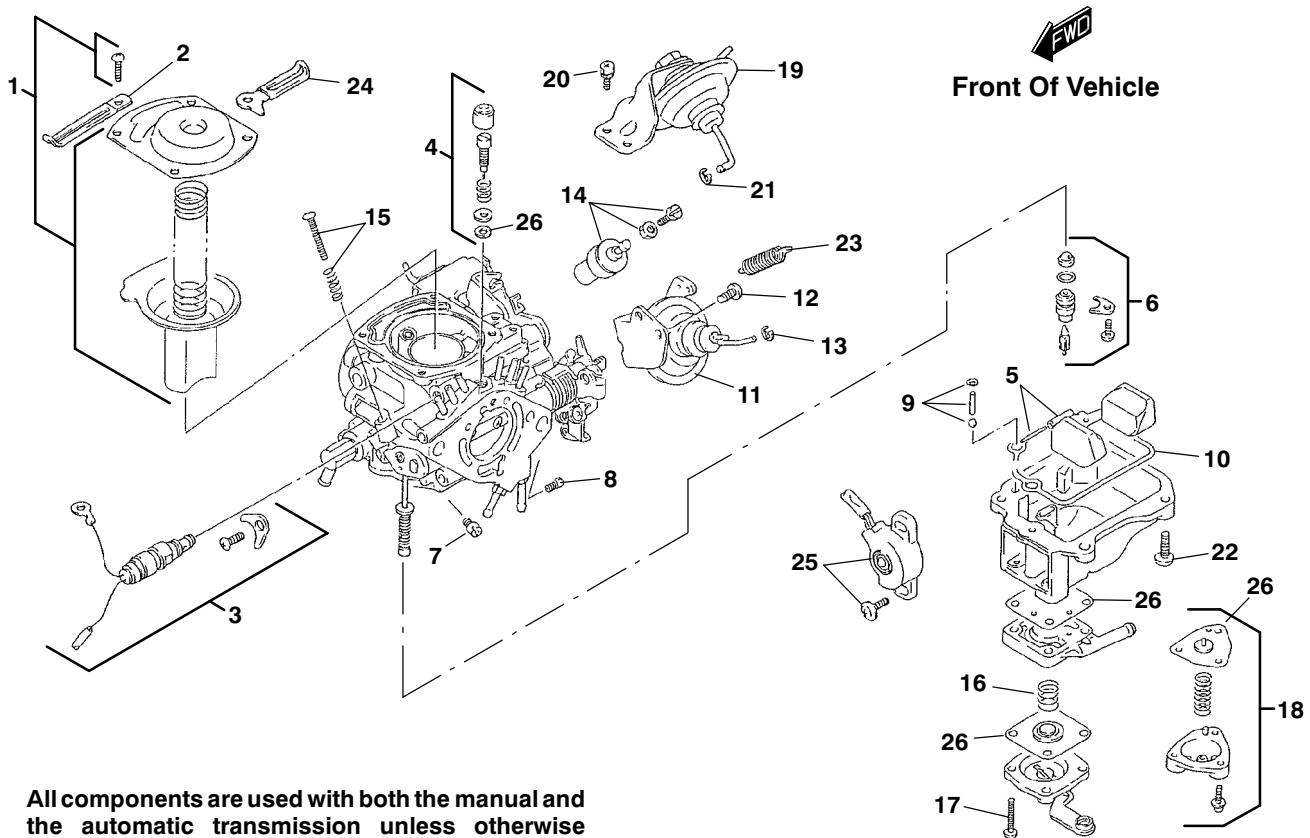


## BREATHER HOSE (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Notes
1	4120054	Hose, breather .....	1	
2	2702484	Clip .....	2	
3	2702485	Clamp .....	1	
4	2702486	Bolt .....	1	
5	4120055	Hose, PCV .....	1	
6	2702489	Seal, PCV valve .....	1	
7	4120056	Valve, PCV .....	1	
8	2702491	Clip .....	2	
9	4120057	Clamp .....	1	
10	2702486	Bolt .....	1	

## CARBURETOR (SUZUKI K6A)

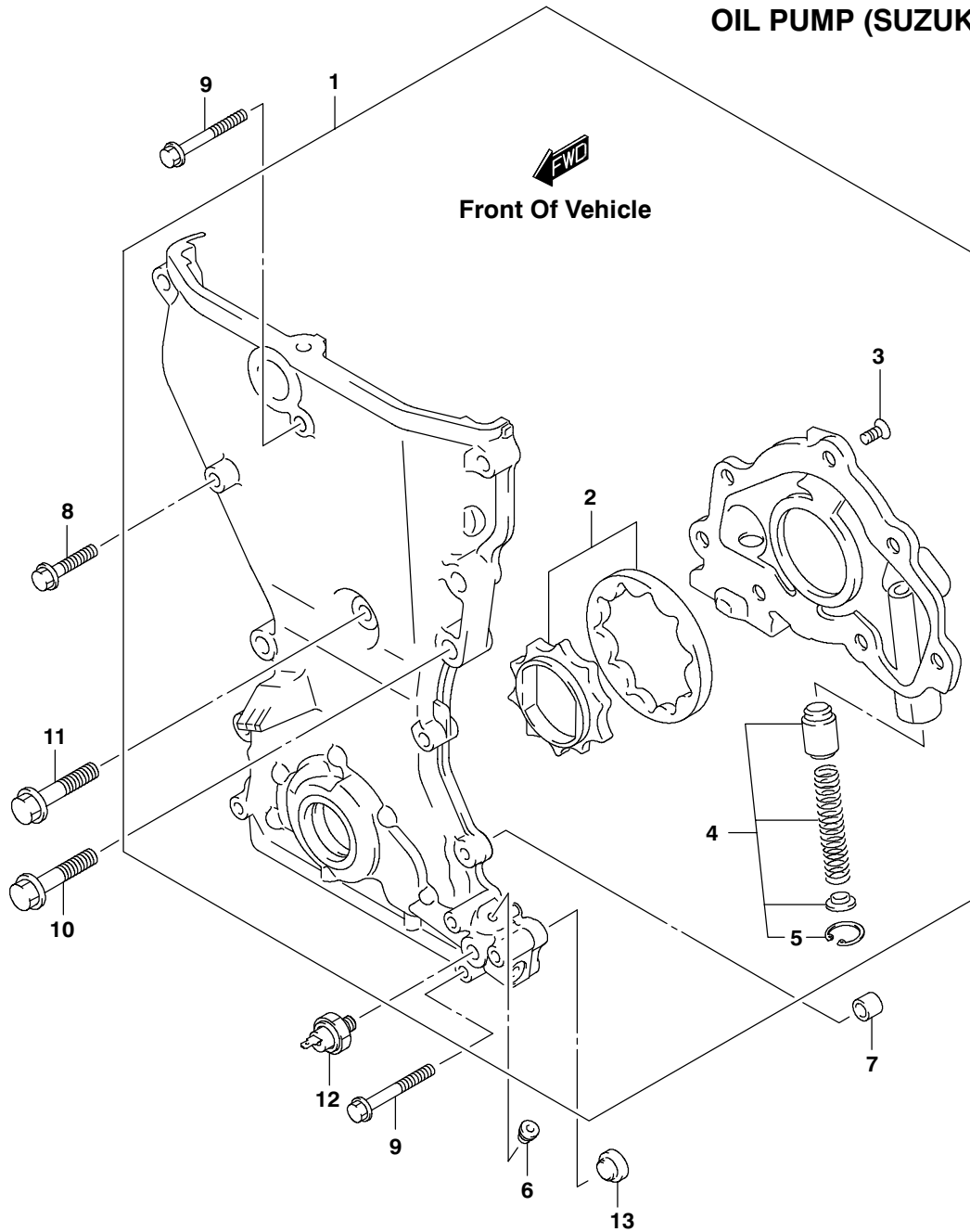


**All components are used with both the manual and the automatic transmission unless otherwise noted in the parts list shown below.**

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
	2700623	Carburetor (automatic transmission)	1	15	13275-63CT0	•Screw, throttle adjustment (auto. trans.)	1
	2700622	Carburetor (manual transmission)	1	(15)	13275-851T0	•Screw, throttle adjustment (mnl. trans.)	1
1	13310-53FT0	•Valve set, piston	1	16	13494-78420	•Spring	1
2	09404-06433	•Clamp	1	17	02112-34253	•Bolt	4
3	13260-50FT0	•Solenoid set	1	18	13320-66CT0	•Valve set, power	1
4	13270-850T0	•Screw set, idle adjust	1	19	95550-85010	•Actuator, idle-up (auto. trans.)	1
5	13250-70DT0	•Float	1	(19)	95550-85500	•Actuator, idle-up (mnl. trans.)	1
6	13370-70DT0	•Valve, needle	1	20	13372-70D00	•Bolt (auto. trans.)	2
7	09491-92005	•Jet, main (auto. trans.)	1	(20)	09137-05009	•Bolt (mnl. trans.)	2
(7)	09491-92006	•Jet, main (mnl. trans.)	1	21	13384-78330	•Retainer, E-ring	1
8	09492-26002	•Jet, power (auto. trans.)	1	22	13601-05148	•Bolt	4
(8)	09492-27010	•Jet, power (mnl. trans.)	1	23	13326-70D00	•Spring	1
9	13240-60CT0	•Weight set, pump	1	24	09404-06432	•Clamp	1
10	13251-77320	•Gasket, float bowl	1	25	13564-63CT0	•Sensor, throttle position	1
11	13350-50F00	•Chamber, depression	1	26	13380-854T0	•Gasket set (auto. trans.)	1
12	02112-05107	•Screw	1	(26)	13380-851T0	•Gasket set (mnl. trans.)	1
13	13415-85010	•Clip	1				
14	13228-840T0	•Element, thermo	1				

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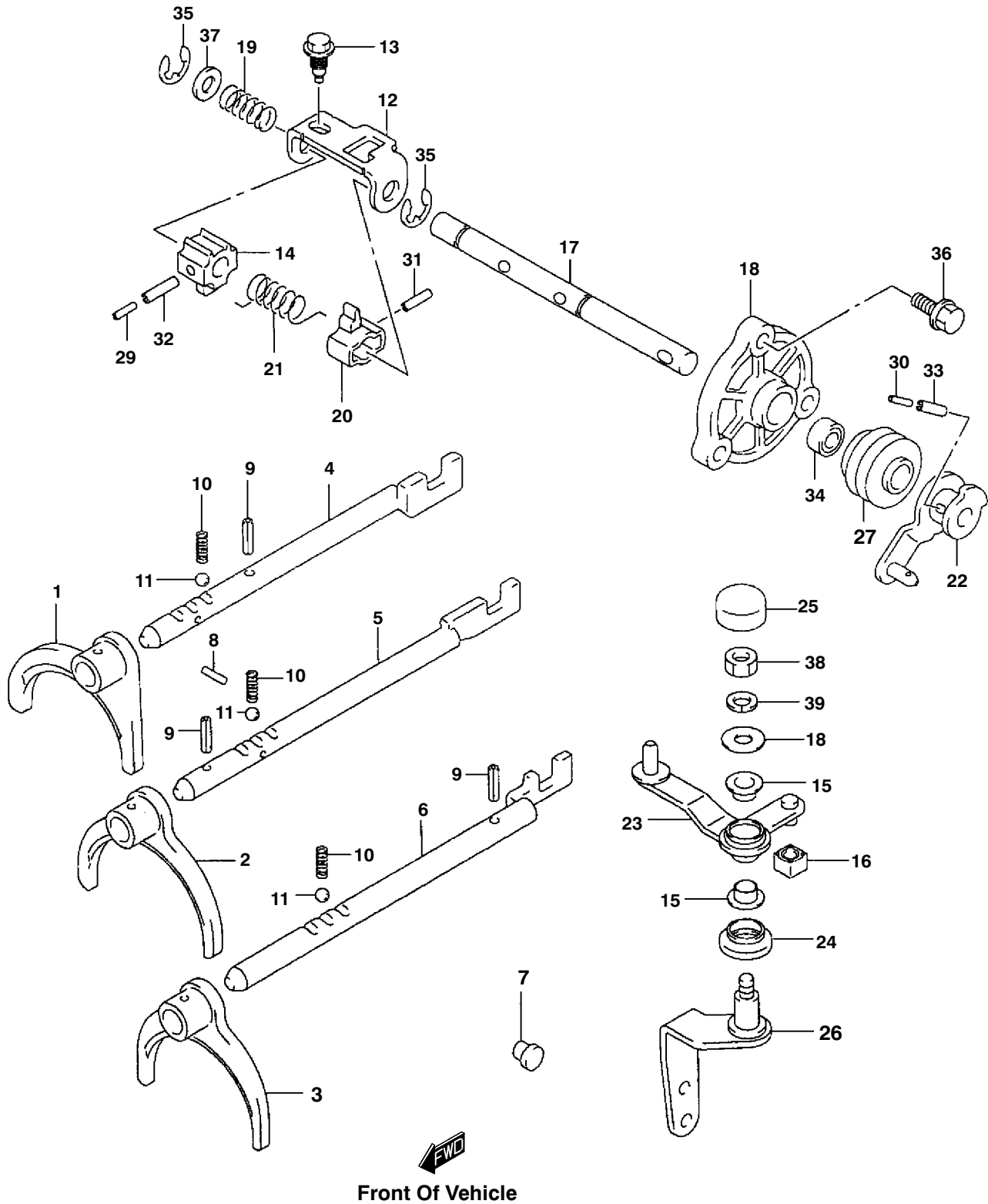
## OIL PUMP (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Notes
1	4120068	Pump, oil .....	1	
2	4120069	•Rotor set .....	1	
3	2702517	•Screw .....	7	
4	4120070	•Valve set .....	1	
5	4120071	••Circlip .....	1	
6	2701820	Plug .....	1	
7	2701949	Pin .....	2	
8	2702519	Bolt .....	6	
9	2702001	Bolt .....	4	
10	2702659	Bolt .....	5	
11	4120072	Bolt, 8 x 40 .....	1	
12	2701904	Switch, oil pressure .....	1	
13	4120073	Collar, oil gallery .....	1	

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

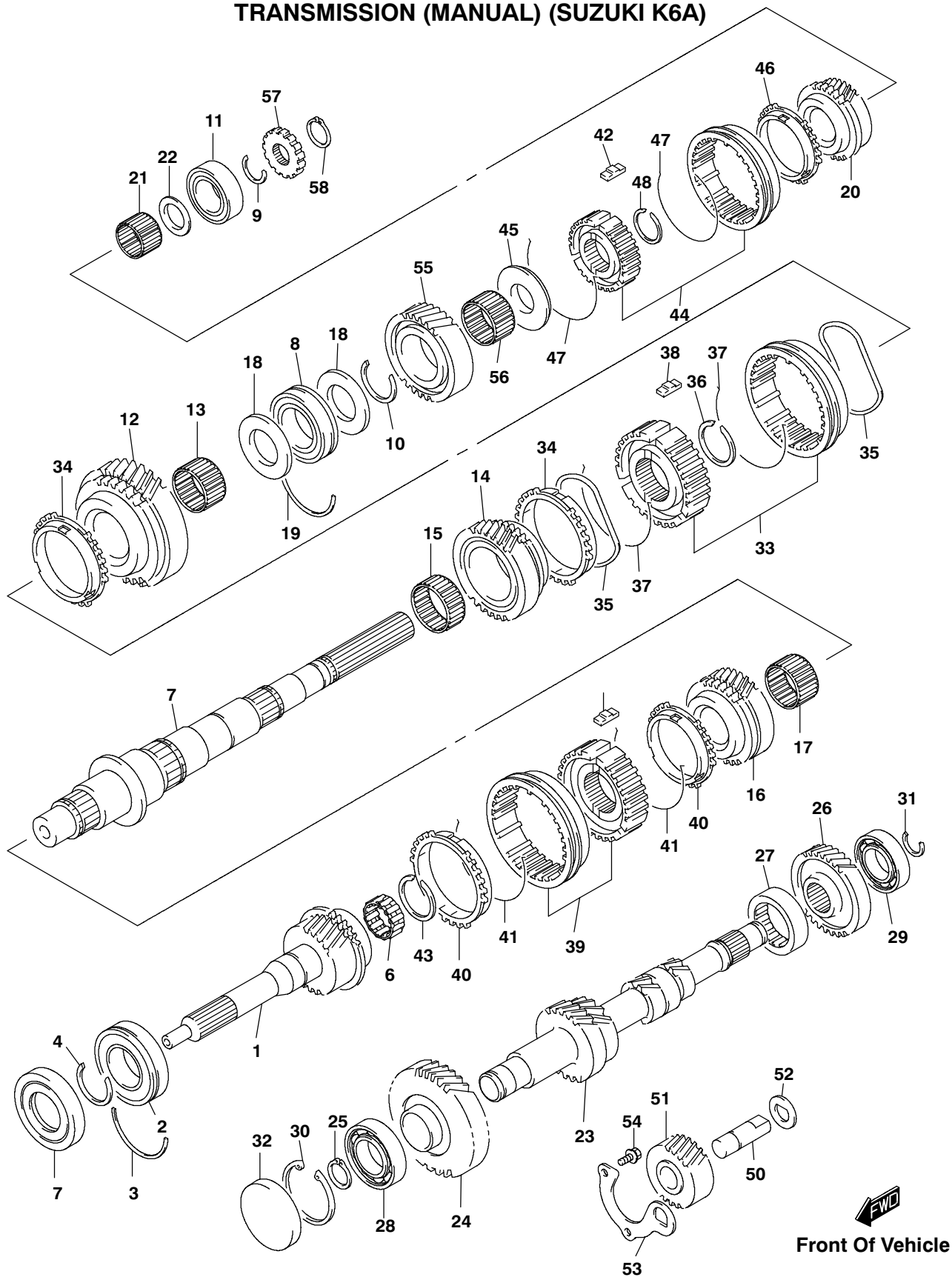
# GEAR SHIFT FORK (MANUAL TRANSMISSION) (SUZUKI K6A)



## GEAR SHIFT FORK (MANUAL TRANSMISSION) (SUZUKI K6A)

Ref. No.	Part No.	Description	No. Req'd	Notes
1	2702618	Fork, low speed gear shift .....	1	
2	2702619	Fork, high speed gear shift .....	1	
3	2702620	Fork, 5 <sup>th</sup> & reverse gear shift .....	1	
4	2702621	Shaft, low speed .....	1	
5	4120091	Shaft, high speed gear shift .....	1	
6	2702625	Shaft, 5 <sup>th</sup> & reverse .....	1	
7	2702626	Plug .....	1	
8	2702627	Pin .....	1	
9	2702628	Pin .....	3	
10	2702629	Spring, gear shift locating .....	3	
11	2702630	Ball .....	5	
12	2701111	Plate, gear shift interlock .....	1	
13	4120092	Bolt, gear shift stop .....	1	
14	2702633	Lever, gear shift & select .....	1	
15	2702634	Bush, select lever boss .....	2	
16	2702635	bush, select lever shaft .....	1	
17	2702636	Shaft, gear shift & select .....	1	
18	2702637	Case, gear shift guide .....	1	
19	2702638	Spring, low select .....	1	
20	2702639	Cam, 5 <sup>th</sup> & reverse gear shift .....	1	
21	2702640	Spring, cam guide return .....	1	
22	2702641	Lever, shift cable .....	1	
23	2702646	Lever, select cable .....	1	
24	2702642	Boot, select lever inside .....	1	
25	2702643	Boot, select lever outside .....	1	
26	4120093	Bracket, select lever .....	1	
27	2702645	Boot, shift & select shift oil .....	1	
28	2702647	Washer .....	1	
29	2702648	Spring pin .....	1	
30	2702649	Spring pin .....	1	
31	2702650	Spring pin .....	1	
32	2702651	Spring pin .....	1	
33	2702652	Spring pin .....	1	
34	2702653	Seal, oil .....	1	
35	2702654	E-ring .....	2	
36	2701827	Bolt .....	5	
37	2702655	Washer .....	1	
38	2702494	Nut .....	1	
39	2702656	Lockwasher .....	1	

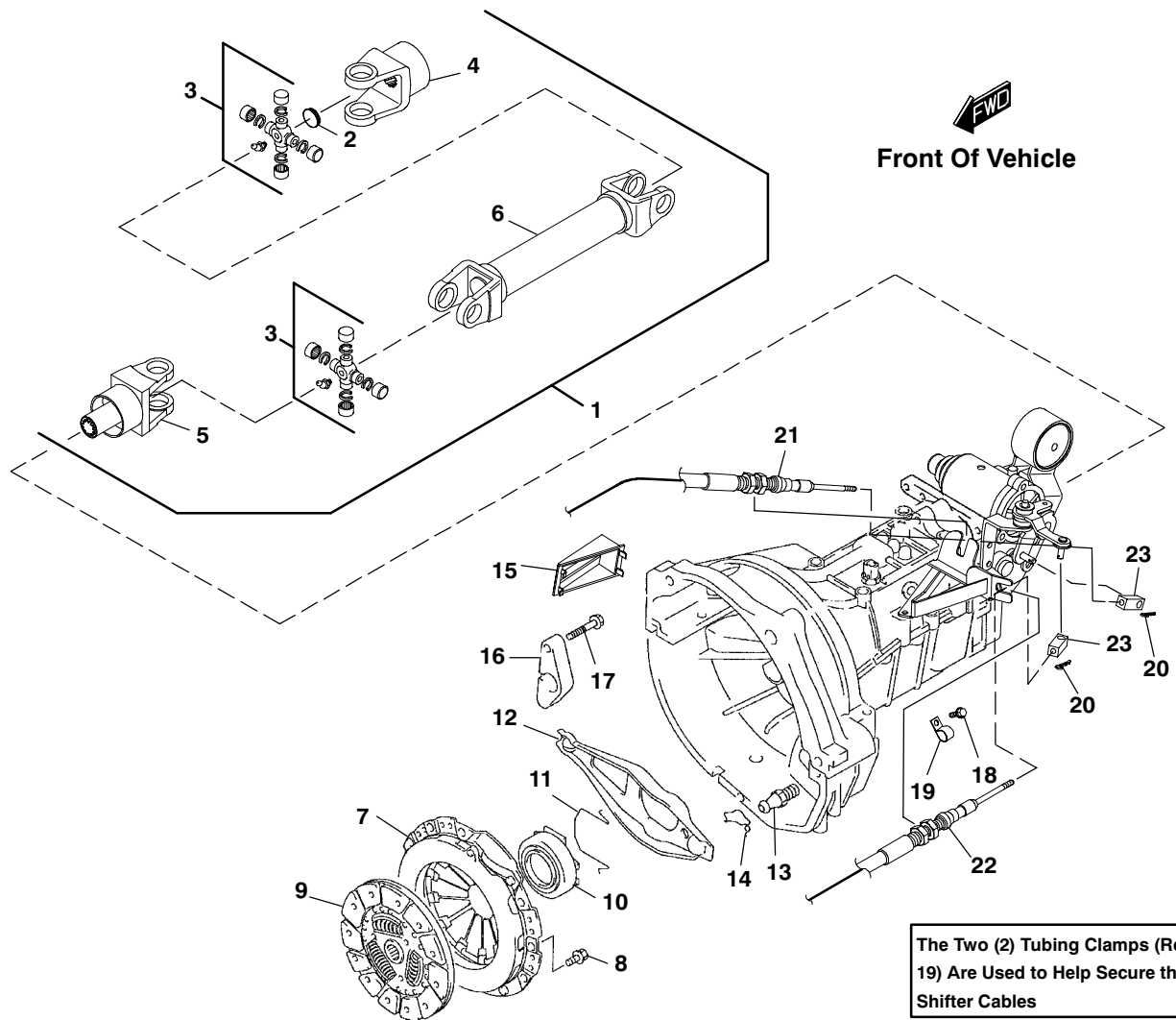
# TRANSMISSION (MANUAL) (SUZUKI K6A)



## TRANSMISSION (MANUAL) (SUZUKI K6A)

Ref. No.	Part No.	Description	No. Req'd	Notes
1	2702556	Shaft, T/M input .....	1	
2	2702557	Bearing .....	1	
3	4120085	C-ring .....	1	
4	2702559	Circlip .....	1	
5	2702560	Seal, input shaft oil .....	1	
6	2702561	Bearing .....	1	
7	4120086	Shaft, transmission main .....	1	
8	2702563	Bearing .....	1	
9	2702564	Circlip .....	1	
10	2702565	Circlip .....	1	
11	2702566	Bearing .....	1	
12	2702567	Gear, main shaft, low .....	1	
13	2702569	Bearing .....	1	
14	2702570	Gear, main shaft, 2 <sup>nd</sup> .....	1	
15	2702571	Bearing .....	1	
16	2702572	Gear, main shaft 3 <sup>rd</sup> .....	1	
17	2702569	Bearing .....	1	
18	2702573	Washer, main shaft bearing .....	2	
19	4120087	C-ring .....	1	
20	4120088	Gear, main shaft 5 <sup>th</sup> .....	1	
21	2702576	Bearing .....	1	
22	2702577	Washer, main shaft, 5 <sup>th</sup> gear .....	1	
23	2702578	Shaft, transmission counter .....	1	
24	2702580	Gear, counter shaft drive .....	1	
25	2702581	Circlip .....	1	
26	4120089	Gear, countershaft 5 <sup>th</sup> .....	1	
27	2702583	Bearing, counter shaft center .....	1	
28	2702566	Bearing .....	1	
29	2702584	Bearing .....	1	
30	2702585	Circlip .....	1	
31	2702586	Circlip .....	1	
32	2702587	Plug .....	1	
33	2702595	Hub, low speed sync .....	1	
34	2702596	Ring, low speed sync .....	2	
35	4120090	Spring, sync ring low .....	2	
36	2702598	Circlip .....	1	
37	2702599	Spring .....	2	
38	2702600	Key, high speed sync .....	3	
39	2702601	Hub, high speed sync .....	1	
40	2702602	Ring, 2 <sup>nd</sup> gear sync .....	2	
41	2702603	Spring, low speed sync .....	2	
42	2702600	Key, high speed sync .....	3	
43	2702604	Circlip, high speed sync hub .....	1	
44	2702605	Hub, 5 <sup>th</sup> speed sync .....	1	
45	2702606	Plate, 5 <sup>th</sup> sync hub .....	1	
46	2702607	Ring, high speed sync .....	1	
47	2702609	Spring, 5 <sup>th</sup> sync .....	2	
48	2702610	Circlip, sync hub .....	1	
49	2702600	Key, high speed sync .....	3	
50	2702611	Shaft, revers idle gear .....	1	
51	2702612	Gear, reverse idle .....	1	
52	2702613	Washer .....	1	
53	2702614	Plate, reverse gear shaft stop .....	1	
54	2701921	Bolt .....	2	
55	2702615	Gear, main shaft reverse .....	1	
56	2702616	Bearing .....	1	
57	2702617	Ring, speedometer exciter .....	1	
58	2702581	Circlip .....	1	

# CLUTCH and DRIVESHAFT (SUZUKI K6A)

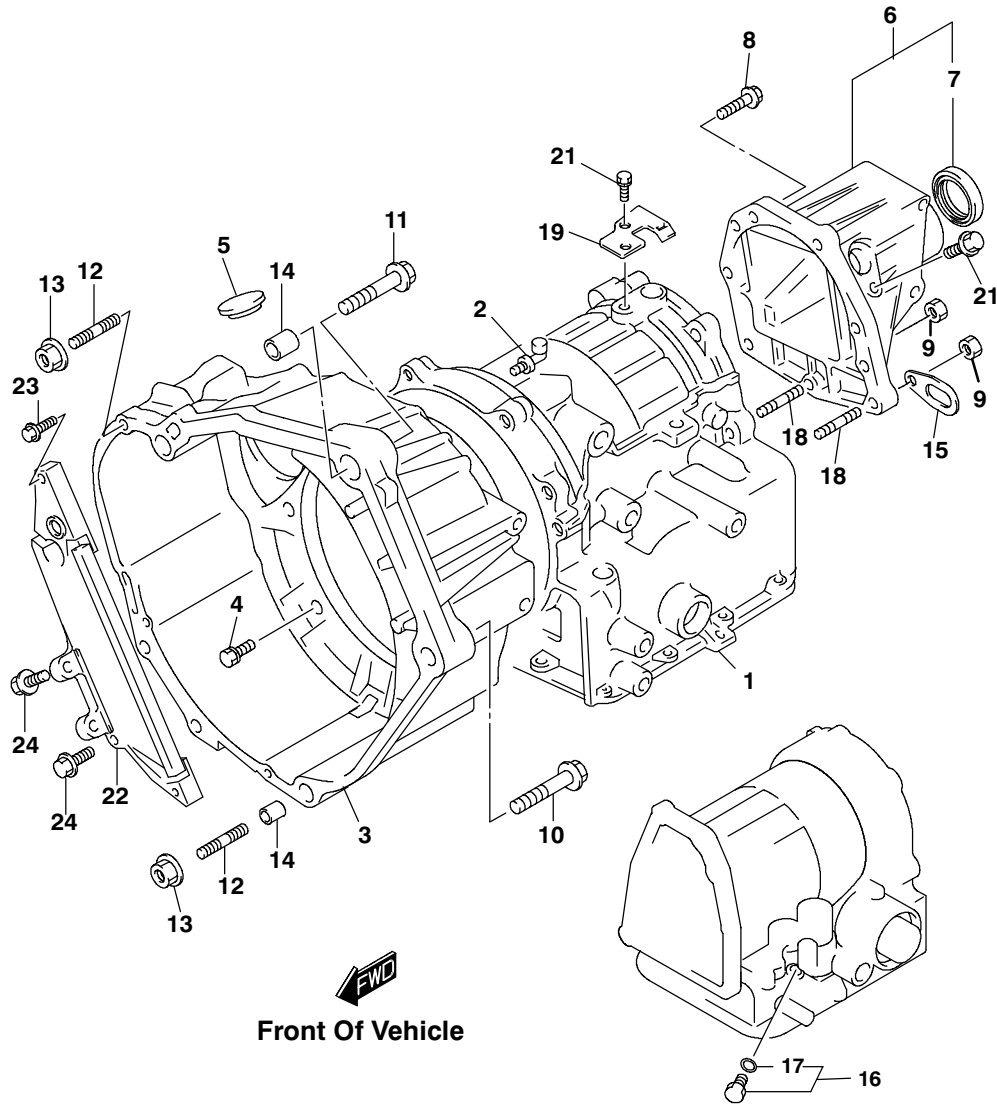




## CLUTCH and DRIVESHAFT (SUZUKI K6A)

Ref. No.	Part No.	Description	No. Req'd	Notes
1	2701321.7	Driveshaft, complete .....	1	
2	548482	• Plug, expansion .....	3	
3	826284	• Cross, u-joint .....	2	
4	826285	• Yoke, universal .....	1	
5	894192	• Yoke, front .....	1	
6	895126	• Shaft, drive .....	1	
7	4117900	Cover, clutch .....	1	
8	2702547	Bolt, 8 x 16 .....	6	
9	2702548	Disc, clutch .....	1	
10	2702549	Bearing, clutch release .....	1	
11	2702550	Clip, clutch release bearing .....	1	
12	2702551	Fork, clutch release .....	1	
13	2702552	Support, clutch release fork .....	1	
14	2702553	Clip, clutch release fork .....	1	
15	2702554	Cap, transmission case .....	1	
16	2702555	Bracket, clutch cable .....	1	
17	2702470	Bolt .....	1	
18	800843	Screw, #10-14 taptite (plastic) .....	2	
19	809092	Clamp, tube/wire .....	2	
20	821164	Pin, hair .25 x 1.12 x .06 .....	2	
21	2701273	Cable, shifter 97" (2464 mm) .....	1	
22	2701273	Cable, shifter 97" (2464 mm) .....	1	
23	2701371	Connector, shifter lever .....	2	

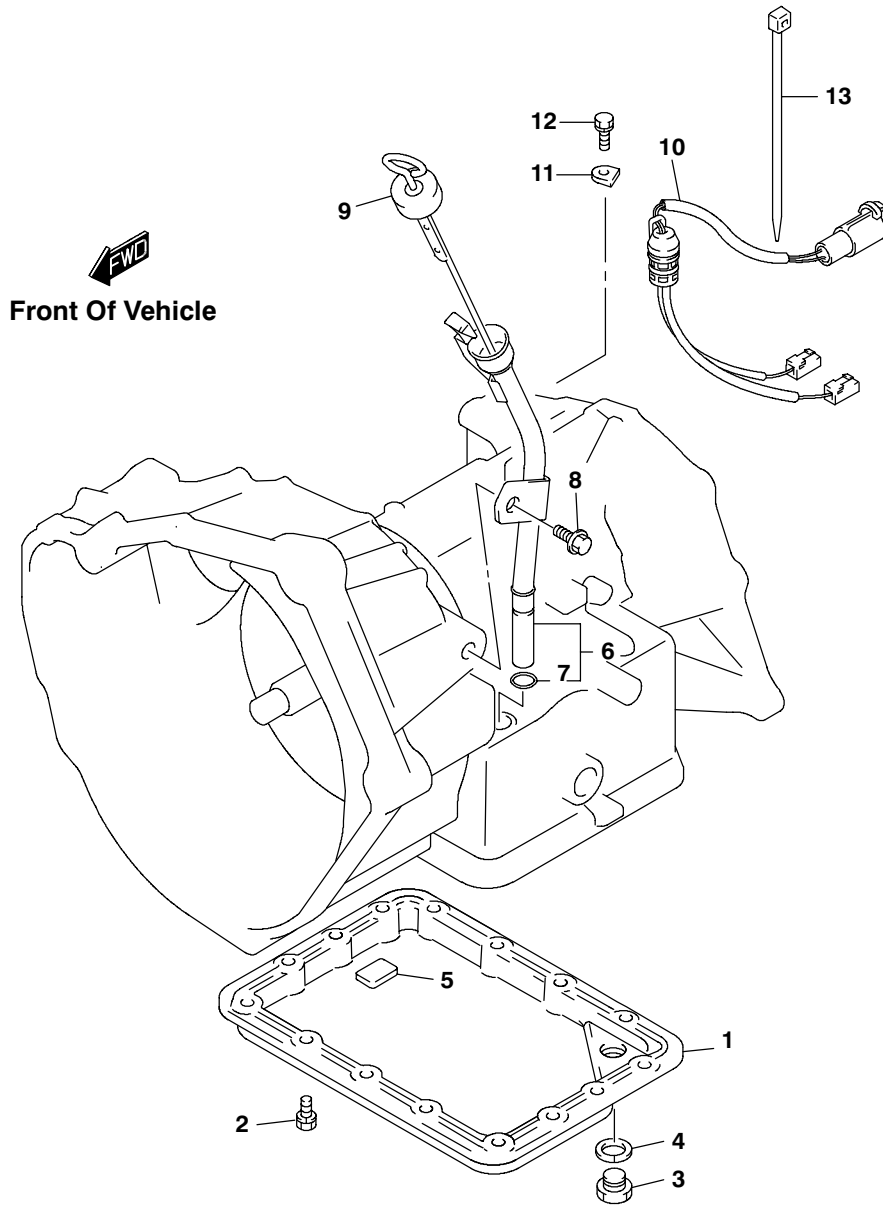
## AUTOMATIC TRANSMISSION (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	2702750	Case, transmission	1	13	2702689	Nut	2
2	2702751	•Breather	1	14	2702690	Collar	2
3	2702752	Housing, torque converter	1	15	2702759	Hook, engine	1
4	2702753	Bolt	6	16	2702760	Plug, booster	1
5	2702662	Cap	1	17	2702761	•O-ring	1
6	2702754	Housing, extension	1	18	2702762	Bolt, transmission case	2
7	2702683	•Seal, extension case	1	19	2702763	Bracket, connector clamp	1
8	2702755	Bolt	5	20	4120102	Bolt, connector clamp bracket	1
9	2702494	Nut	2	21	2702764	Bolt	1
10	2702756	Bolt	1	22	24790-67H10	Engine & t/m stiffener	1
11	2702686	Bolt	1	23	2702519	Bolt	2
12	2702688	Stud	2	24	2702470	Bolt	2

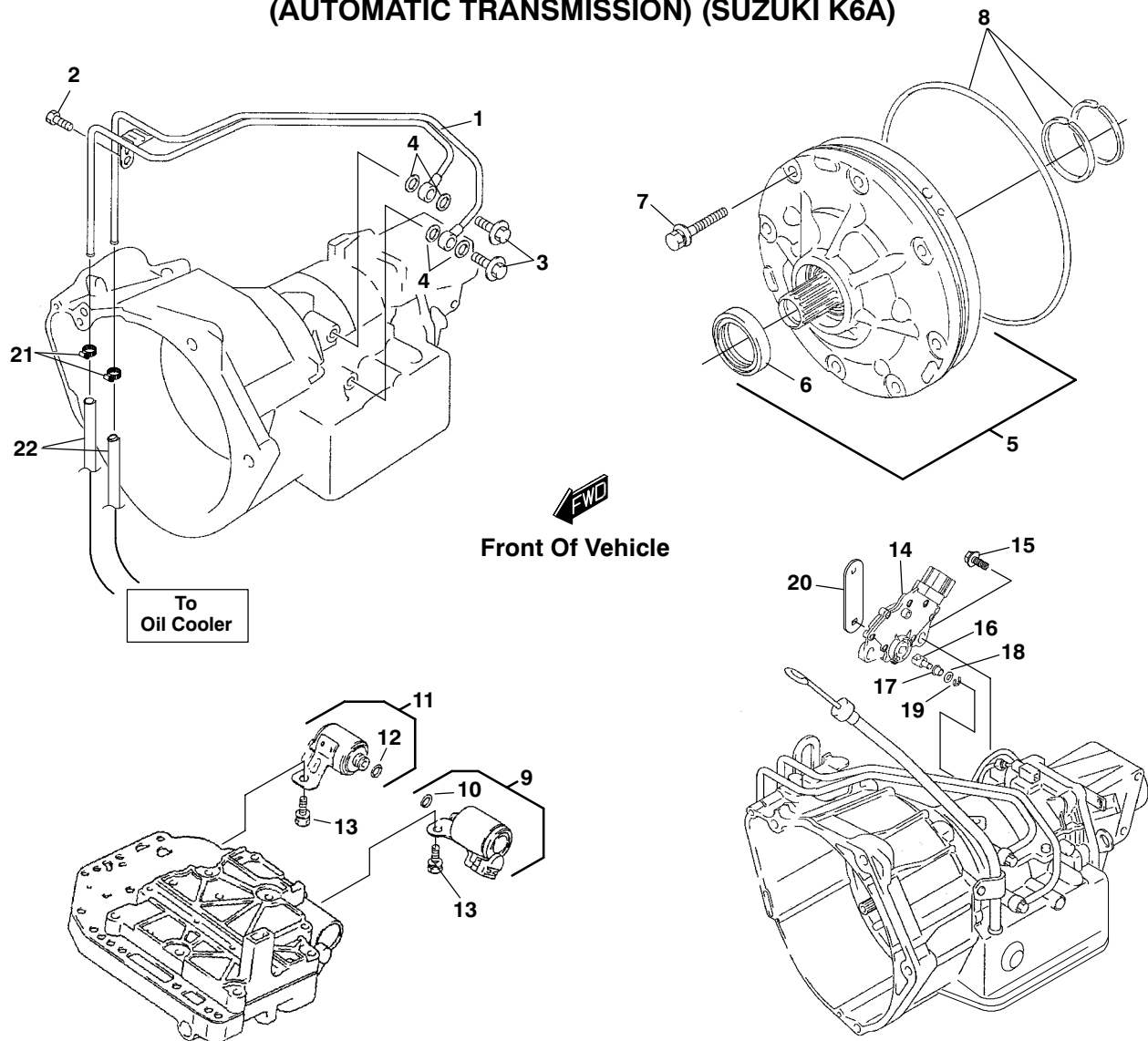
• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

## AUTOMATIC TRANSMISSION PAN, DIPSTICK and GASKETS (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	2702806	Pan, transmission oil	1	8	2702475	Bolt	1
2	2702807	Bolt	15	9	4120110	Oil level gauge	1
3	2702808	Plug, transmission oil drain	1	10	2702816	Solenoid wire harness	1
4	2702809	Gasket, plug	1	11	2702817	Solenoid wire harness hold plate	1
5	2702810	Magneto, oil cleaner	1	12	2701921	Bolt	1
6	2702812	Tube, oil filler (dipstick)	1	13	2702818	Solenoid wire harness clamp	1
7	2702813	O-ring	1				

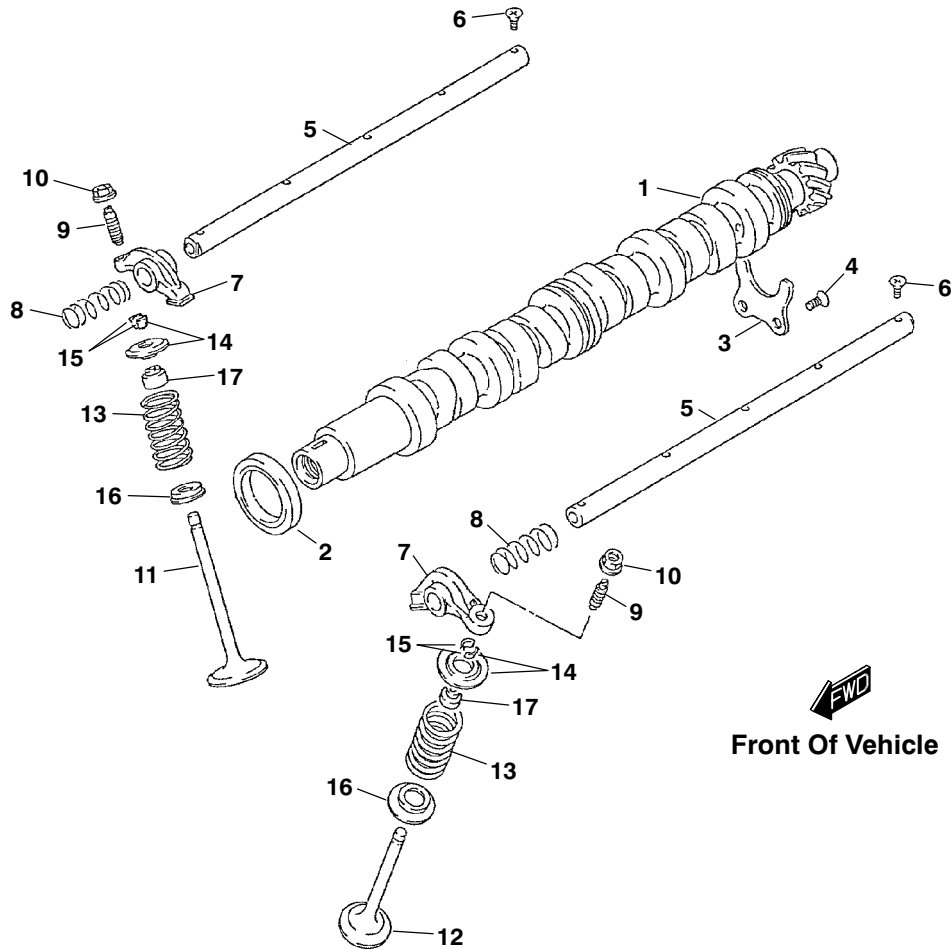
## TRANSMISSION TUBES, OIL PUMP, SOLENOIDS and SHIFT SWITCH (AUTOMATIC TRANSMISSION) (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	2702843	Pipe assembly, oil	1	12	2702823	•O-ring	1
2	2702849	Bolt	1	13	2702764	Bolt	2
3	2702847	Union bolt	2	14	2702885	Switch, shift	1
4	2702845	Gasket	4	15	2702886	Bolt	1
5	2702765	Pump, oil	1	16	2702881	Joint, transmission shifter	2
6	2702766	•Seal, oil pump	1	17	2702882	Bushing	1
7	2702767	Bolt, oil pump	8	18	2702883	Washer	1
8	2702768	Ring set, oil pump seal	1	19	2702884	E-ring	1
9	2702822	Solenoid, direct clutch	1	20	842740	Lever, shifter	1
10	2702823	•O-ring	1	21	825624	Clamp, hose	2
11	2702824	Solenoid, 2nd brake	1	22	826590	Hose, 5/16 i.d.	As Req'd.

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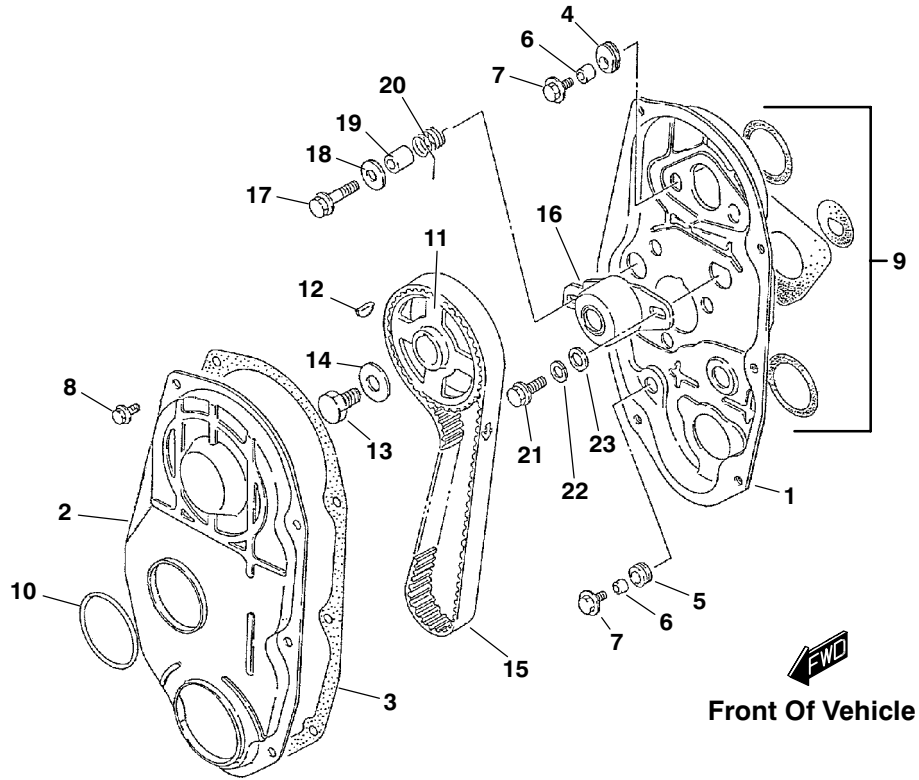
## CAMSHAFT & COMPONENTS (SUZUKI 970)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	12710-77314	Camshaft . . . . .	1	10	09159-07002	Nut . . . . .	8
2	09283-32040	Seal, camshaft . . . . .	1	11	12911-78101	Valve, inlet . . . . .	4
3	12749-73002	Plate, cam shaft thrust . . . . .	1	12	12915-84010	Valve, exhaust . . . . .	4
4	02122-06123	Screw . . . . .	2	13	12921-73002	Spring, valve . . . . .	8
5	12860-73004	Shaft, valve rocker . . . . .	2	14	12900-82810	Retainer, valve spring . . . . .	8
6	02122-06163	Screw . . . . .	10	15	12932-82000	•Cotter, valve . . . . .	16
7	12841-77300	Arm, valve rocker . . . . .	8	16	12933-73000	Seat, valve spring . . . . .	8
8	12891-51G00	Spring, rocker arm . . . . .	8	17	09289-07007	Seal, oil . . . . .	8
9	12848-73010	Screw, valve adjusting . . . . .	8				

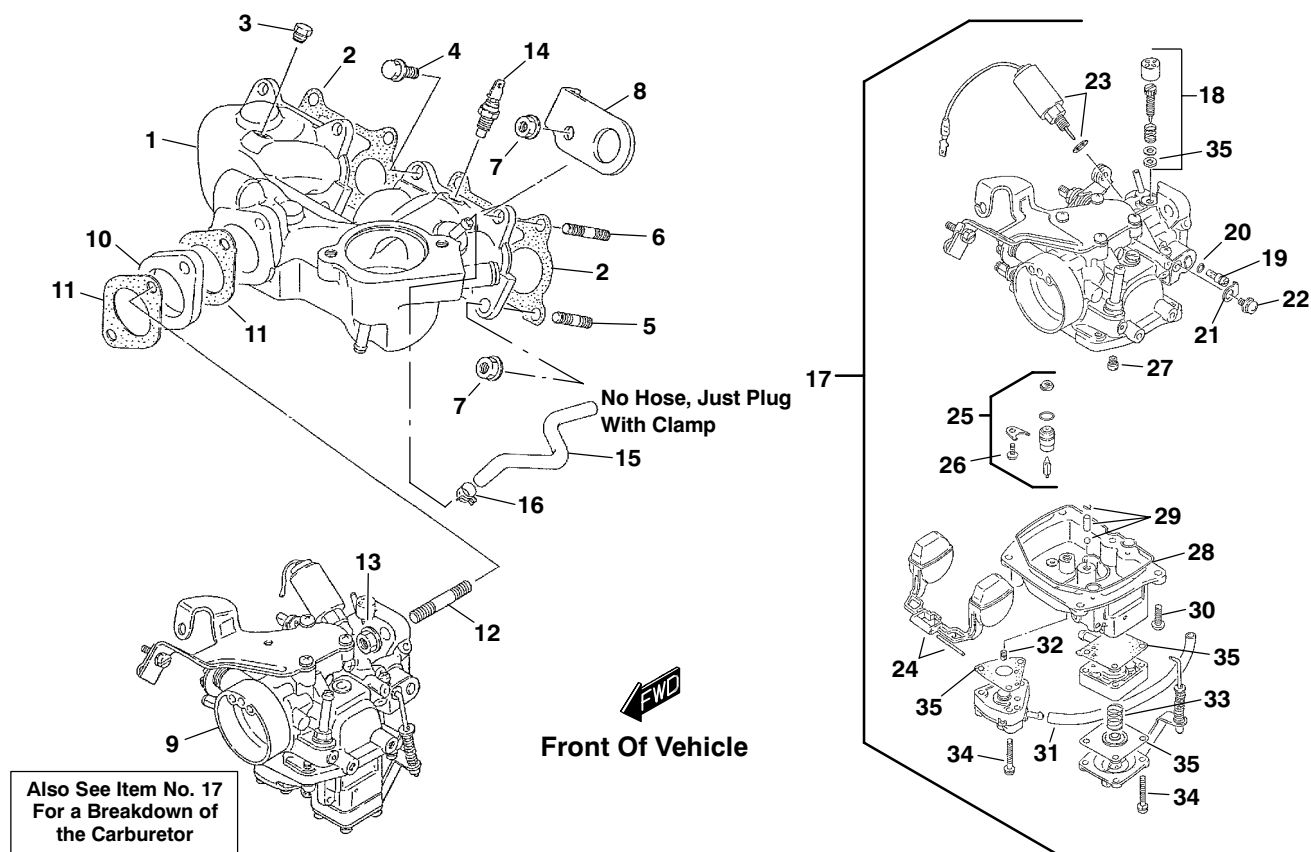
• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

## TIMING BELT & TIMING COVER (SUZUKI 970)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	11360-78100	Cover, inside	1	13	01500-12253	Bolt	1
2	11391-78113	Cover, outside	1	14	09160-12094	Washer (12.5 x 32 x 4.5)	1
3	11399-73010	Gasket, cover	1	15	12761-78400	Belt, timing	1
4	11398-73000	Grommet	2	16	12810-53A00	Tensioner, timing belt	1
5	09308-10004	Grommet	2	17	01550-08403	Bolt	1
6	09180-06106	Spacer (6 x 10 x 17)	4	18	09160-08133	Washer (8.5 x 26 x 1.6)	1
7	09136-06139	Bolt (6 x 16)	4	19	09180-08111	Spacer (8.1 x 16 x 17)	1
8	02162-06103	Bolt	6	20	12821-78100	Spring, tensioner	1
9	11480-78110	Seal set, inside cover	1	21	09103-08152	Bolt (8 x 25)	1
10	11484-73000	Grommet, outside	1	22	08321-01083	Lockwasher	1
11	12741-78403	Pulley, timing belt	1	23	09160-08126	Washer (8.5 x 20 x 2.6)	1
12	08341-31059	Key	1				

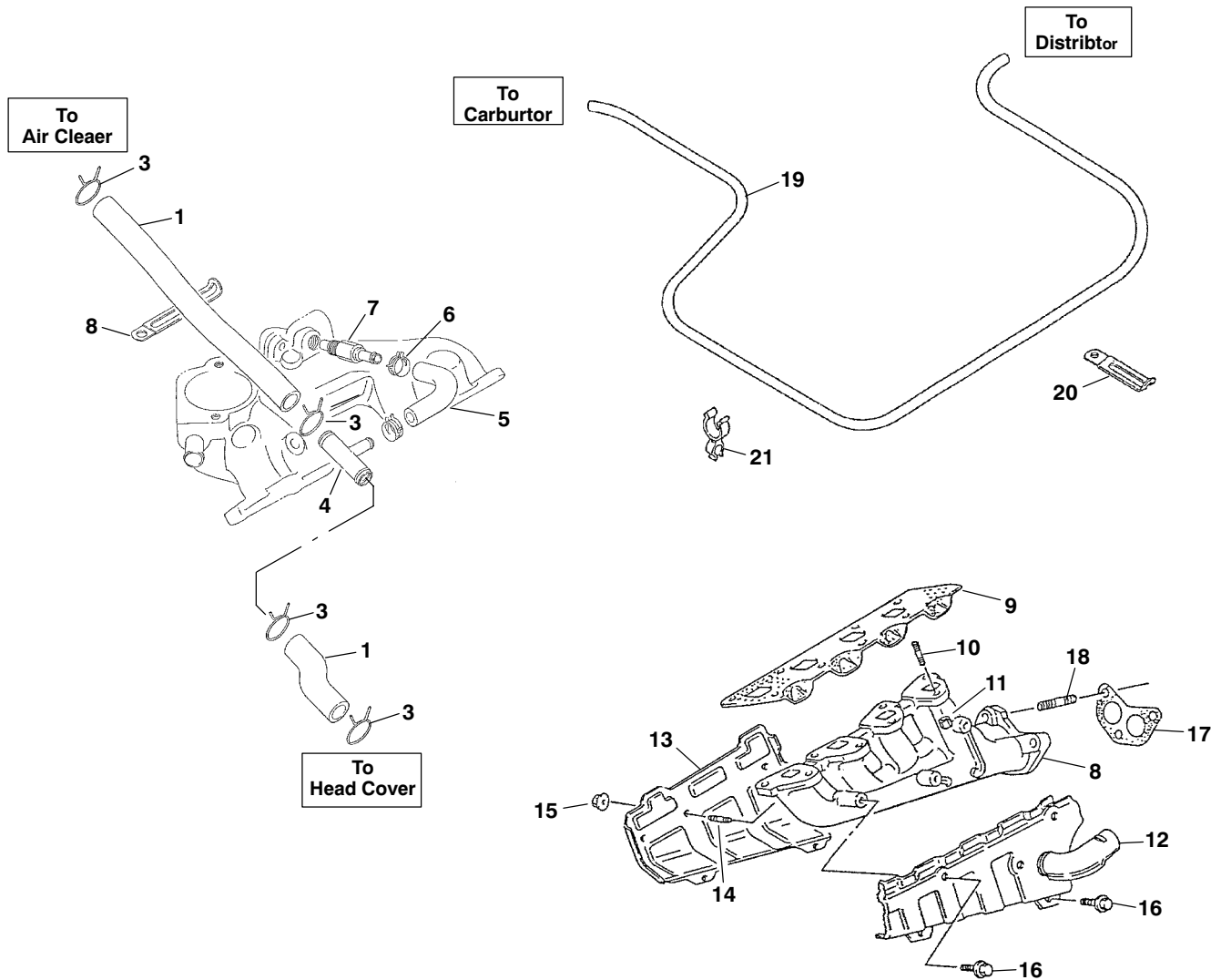
## CARBURETOR & INTAKE MANIFOLD (SUZUKI 970)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	13110-85X57	Manifold, intake	1	19	09492-47006	•Jet, pilot (#47.5)	1
2	13119-73001-H17	Gasket, intake mnfld.	2	20	13278-45010	•O-ring	1
3	09246-04005	Plug, boost	1	21	13398-78110	•Plate	1
4	01550-08203	Bolt	3	22	02112-75103	•Screw	1
5	01411-08203	Stud bolt	4	23	13260-797T0	•Solenoid set	1
6	01411-08253	Stud bolt	1	24	13250-852T0	•Float set	1
7	08316-10083	Nut	5	25	13370-60CT0	•Valve set, needle	1
8	11851-62B00	Hook, engine	1	26	02112-04087	•Screw	1
9	2700621	Carburetor, complete	1	27	09491-21024	•Jet, main (#108.8)	1
10	13121-80000	Insulator, carburetor	1	28	13251-79110	•O-ring	1
11	13125-80000-H17	Gasket, carburetor	2	29	13240-852T0	•Weight set, pump	1
12	09108-08169	Stud bolt	2	30	02142-05163	•Screw	5
13	08316-10083	Nut	2	31	09355-35754	•Hose	As Req'd.
14	34850-50A00	Gauge, water temp.	1	32	09492-65005	•Jet, enrichment (#65)	1
15	51030-85051	Hose, brake vacuum No. 3	1	33	13494-78420	•Spring	1
16	09401-15404	Clamp	1	34	02112-34253	•Screw	1
17	2700621	Carburetor, complete	1	35	13380-793T0	•Gasket set	1
18	13270-855T0	•Screw set, idle adjust	1				

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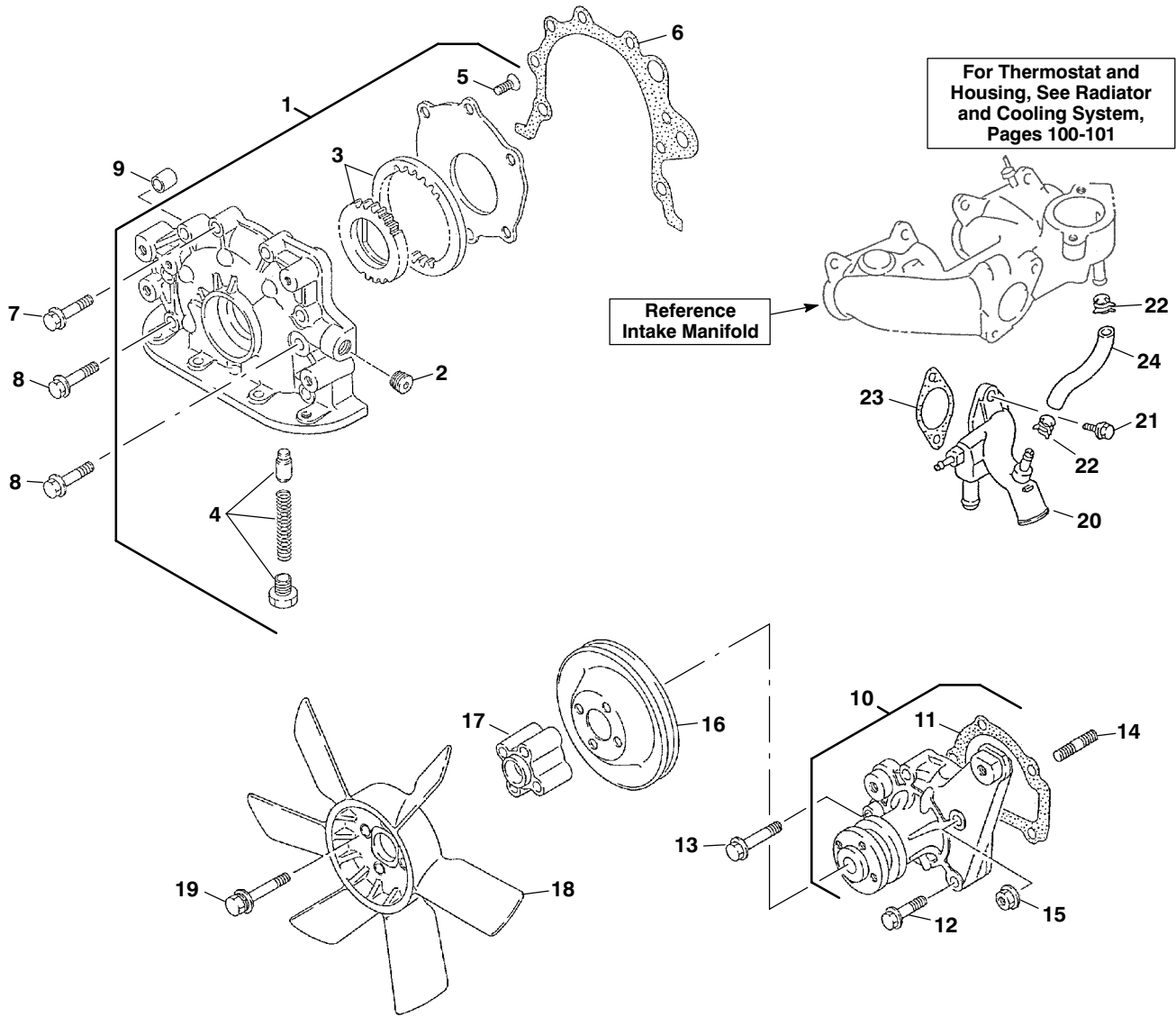
## PCV VALVE, EMISSIONS & EXHAUST MANIFOLD (SUZUKI 970)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	09355-13207-600	Hose . . . . .	As Req'd.	12	14120-85220	Cover, upper . . . . .	1
2	09401-20301	Clip . . . . .	4	13	14125-85201	Cover, lower . . . . .	1
3	09367-14002	Union, 3-way . . . . .	1	14	01411-06123	Stud bolt . . . . .	3
4	11193-85000	Hose, PCV . . . . .	1	15	08361-35063	Nut . . . . .	3
5	09401-13414	Clip . . . . .	2	16	09103-06168	Bolt (6 x 10) . . . . .	5
6	18118-80010	Valve, PCV . . . . .	1	17	14181-85200	Gasket, exhaust pipe . . . . .	1
7	09404-08420	Clamp, breather hose . . . . .	1	18	01411-10253	Stud bolt . . . . .	3
8	14111-85210	Manifold, exhaust . . . . .	1	19	09355-35754-600	Hose . . . . .	As Req'd.
9	14140-85200	Gasket, exhaust manifold . . . . .	1	20	09404-08206	Clamp . . . . .	1
10	01411-08253	Stud bolt . . . . .	8	21	09408-00060	Clamp . . . . .	1
11	08310-00083	Nut . . . . .	8				



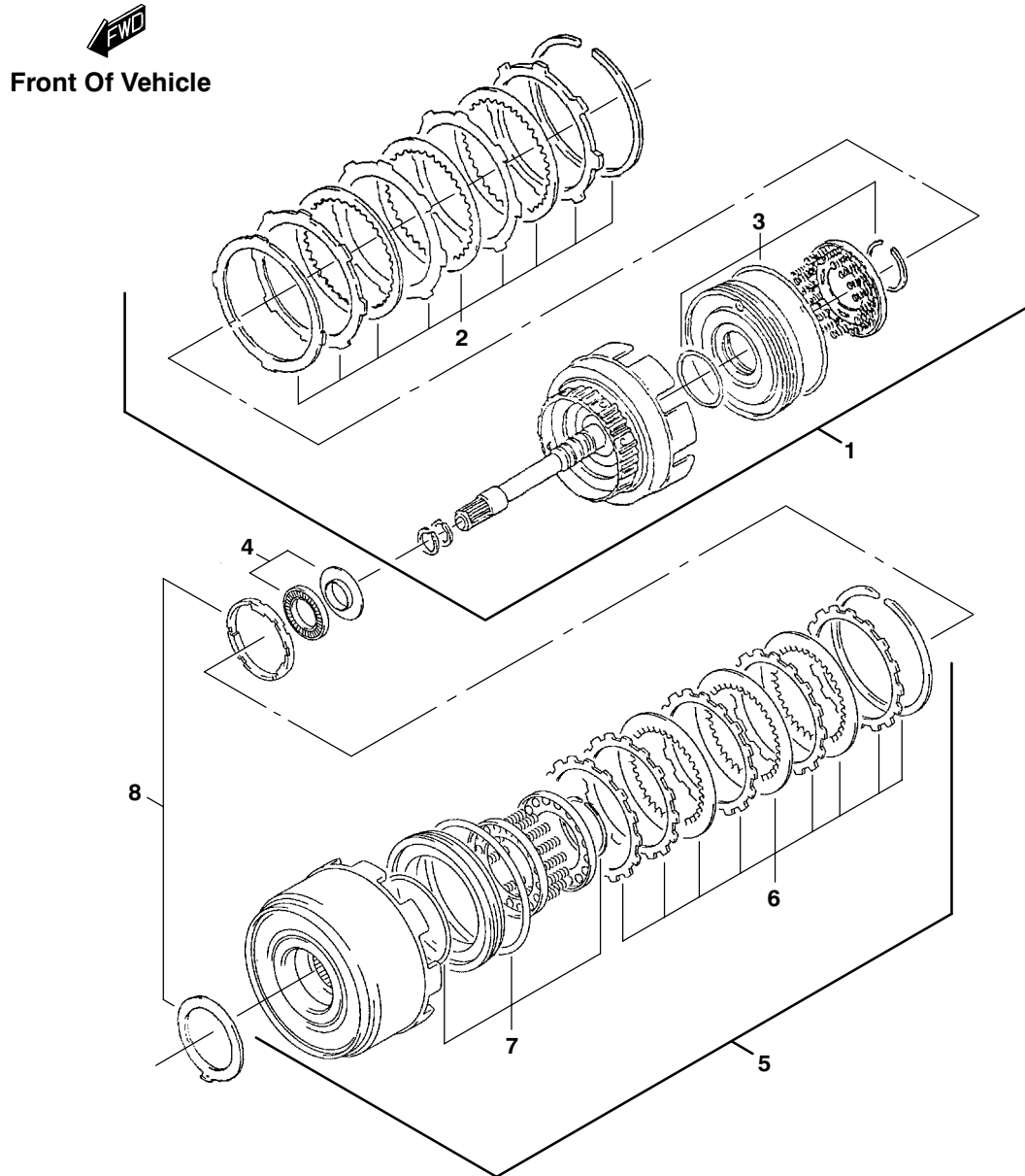
## OIL PUMP and WATER PUMP (SUZUKI 970)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	16100-73004	Pump, oil	1	13	01550-06403	Bolt	1
2	09246-06002	•Plug, oil gallery	1	14	01411-06253	Stud bolt	2
3	16130-73000	•Rotor set, oil pump	1	15	08316-10063	Nut	2
4	16150-73000	•Valve set, oil pump relief	1	16	17511-73001	Pulley, water pump	1
5	02122-06123	•Screw	6	17	17131-80000	Hub, cooling fan	1
6	16119-50E00	Gasket, oil pump case	1	18	17110-77300	Fan, cooling	1
7	01550-06303	Bolt	1	19	01580-06503	Bolt	4
8	01550-06353	Bolt	7	20	17550-77X50	Pipe, water inlet	1
9	04211-09109	Pin	2	21	01550-06203	Bolt	2
10	17400-78821	Pump set, water	1	22	09401-11415	Clip	2
11	17431-73001	•Gasket, water pump	1	23	17559-73000-H17	Gasket, inlet pipe	1
12	01550-06303	Bolt	2	24	09352-70121-00B	Hose, water bypass	1

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

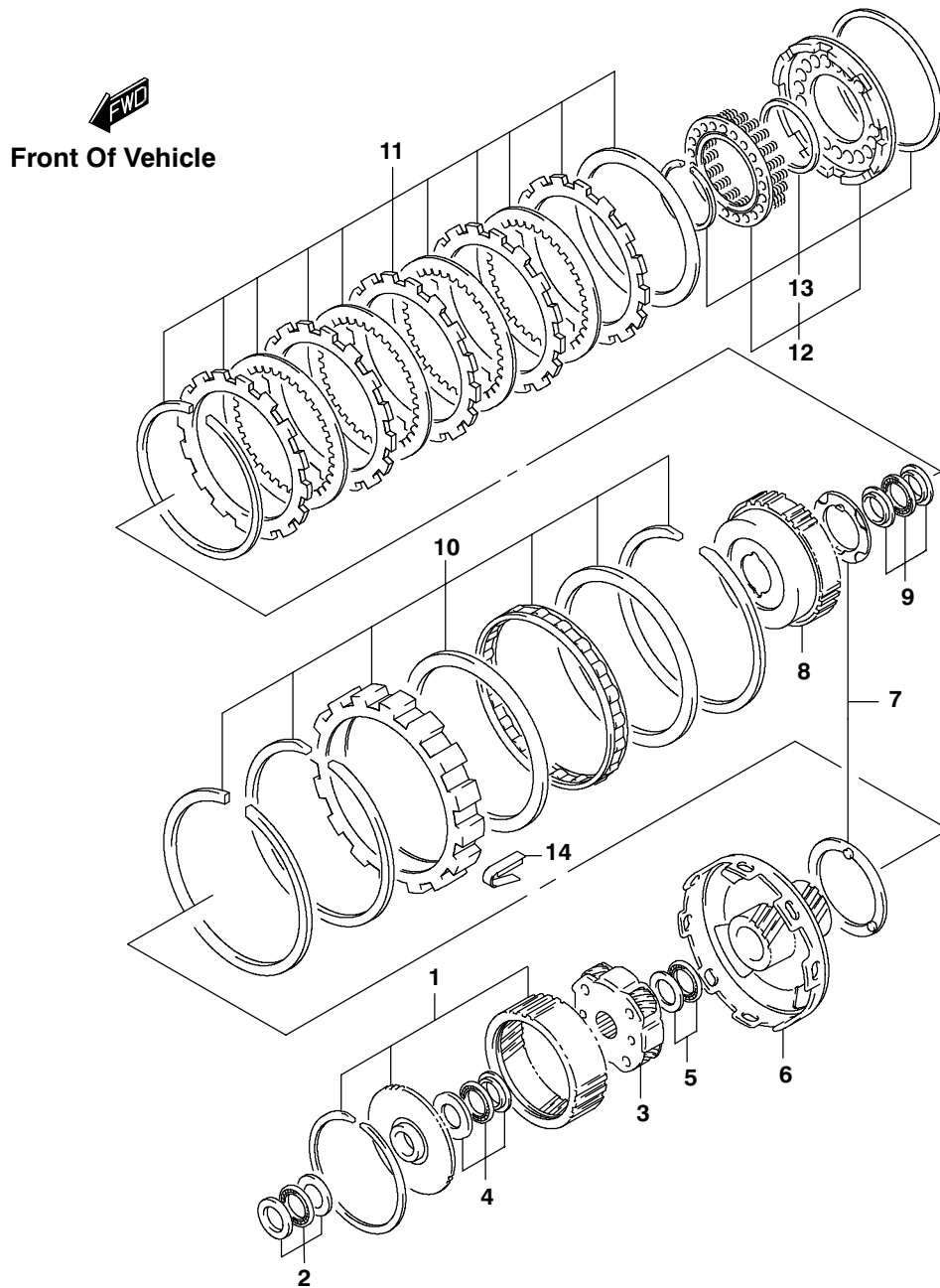
## TRANSMISSION INPUT SHAFT and CLUTCH ASSEMBLY (AUTOMATIC TRANSMISSION) (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description
1	2702769	Shaft set, input	1	5	2702773	Clutch assembly, direct
2	2702770	•Plate set, forward clutch	1	6	2702774	•Plate set, direct clutch
3	2702771	•O-ring set, forward clutch	1	7	2702775	•O-ring set, direct clutch
4	2702772	Bearing set, thrust (No. 1)	1	8	2702776	Washer set, direct clutch

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

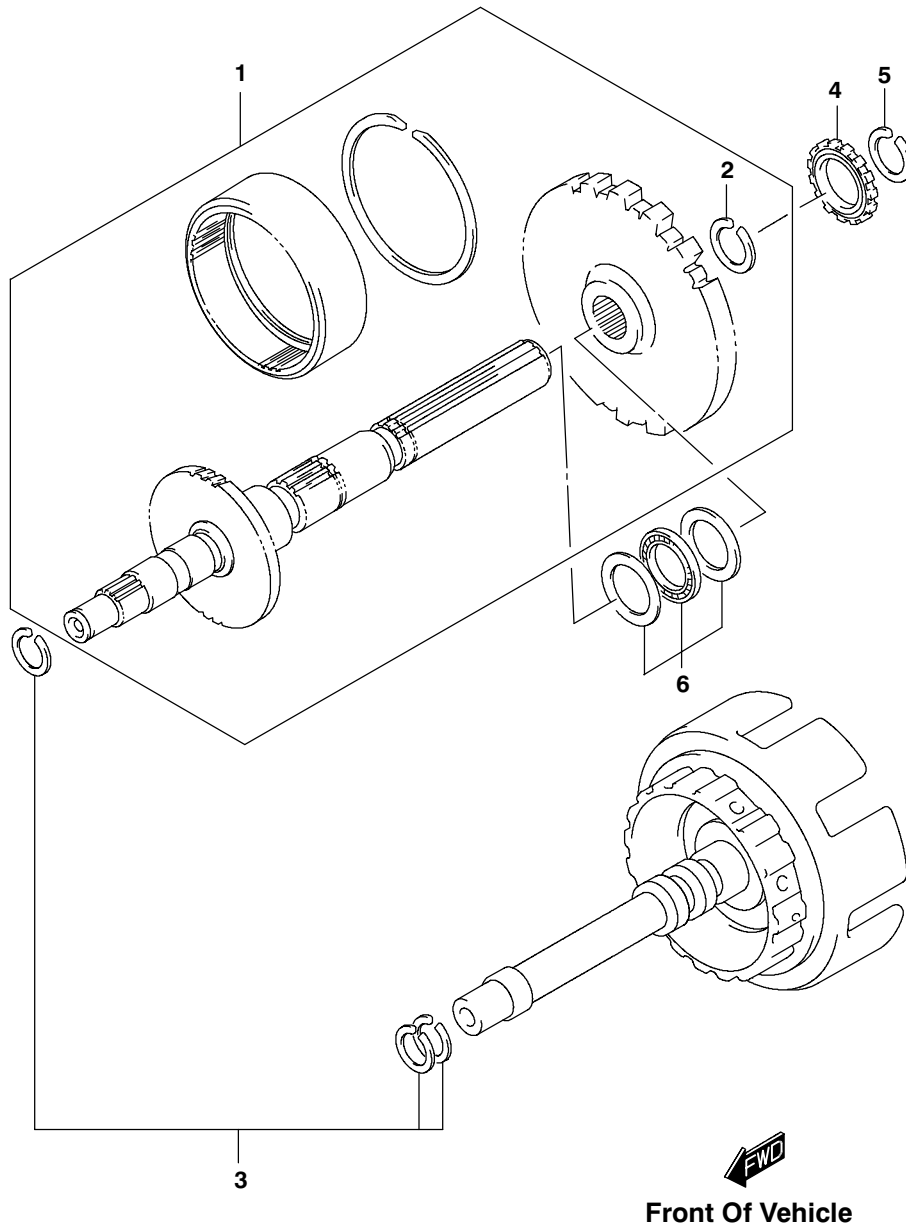
## TRANSMISSION PLANETARY GEARS (AUTOMATIC TRANSMISSION) (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	2702777	Gear, front planetary ring . . . . .	1	8	2702784	Gear, rear planetary . . . . .	1
2	2702778	Bearing set, #3 thrust . . . . .	1	9	2702785	Bearing set, #1 thrust . . . . .	1
3	2702779	Gear, front planetary . . . . .	1	10	4120107	Clutch set, one way . . . . .	1
4	2702780	Bearing set, #4 thrust . . . . .	1	11	4119614	Plate set, 1st/reverse . . . . .	1
5	2702781	Bearing set, #5 thrust . . . . .	1	12	2702788	Piston set, 1st/reverse . . . . .	1
6	2702782	Gear, planetary sun . . . . .	1	13	2702789	•O-ring set, 1st/reverse . . . . .	1
7	2702783	Washer set, thrust . . . . .	1	14	4120108	Retainer, outer race . . . . .	1

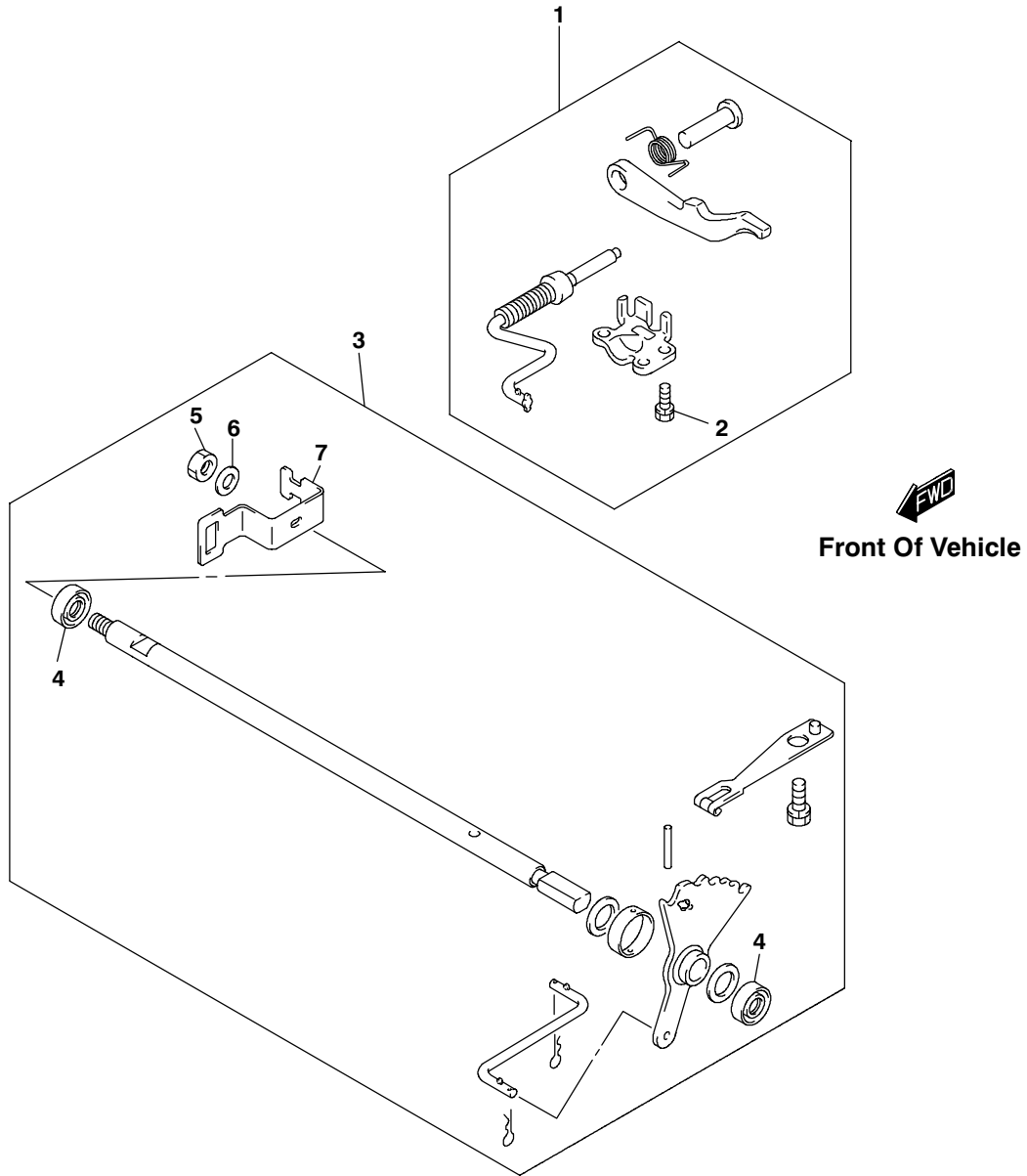
• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

## OUTPUT SHAFT (AUTOMATIC TRANSMISSION) (SUZUKI K6A)



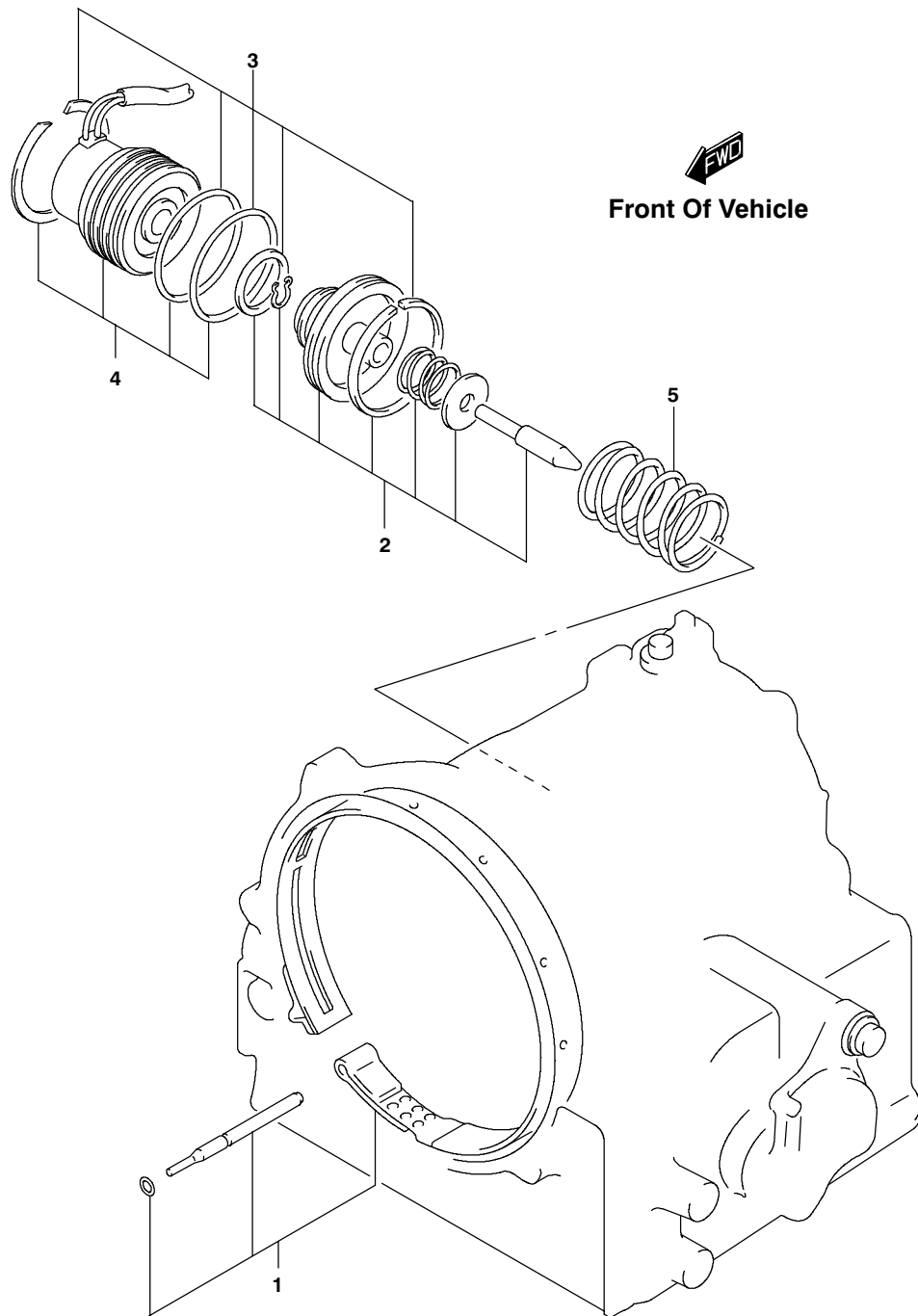
Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	2702790	Output shaft	1	4	2702793	Ring, speedometer exciter	1
2	2702791	Ring, snap	1	5	2702794	Circlip, exciter ring	1
3	2702792	Ring set, shaft seal	1	6	2702795	Bearing set, #6 thrust	1

## PARKING BRAKE (AUTOMATIC TRANSMISSION) (SUZUKI K6A)



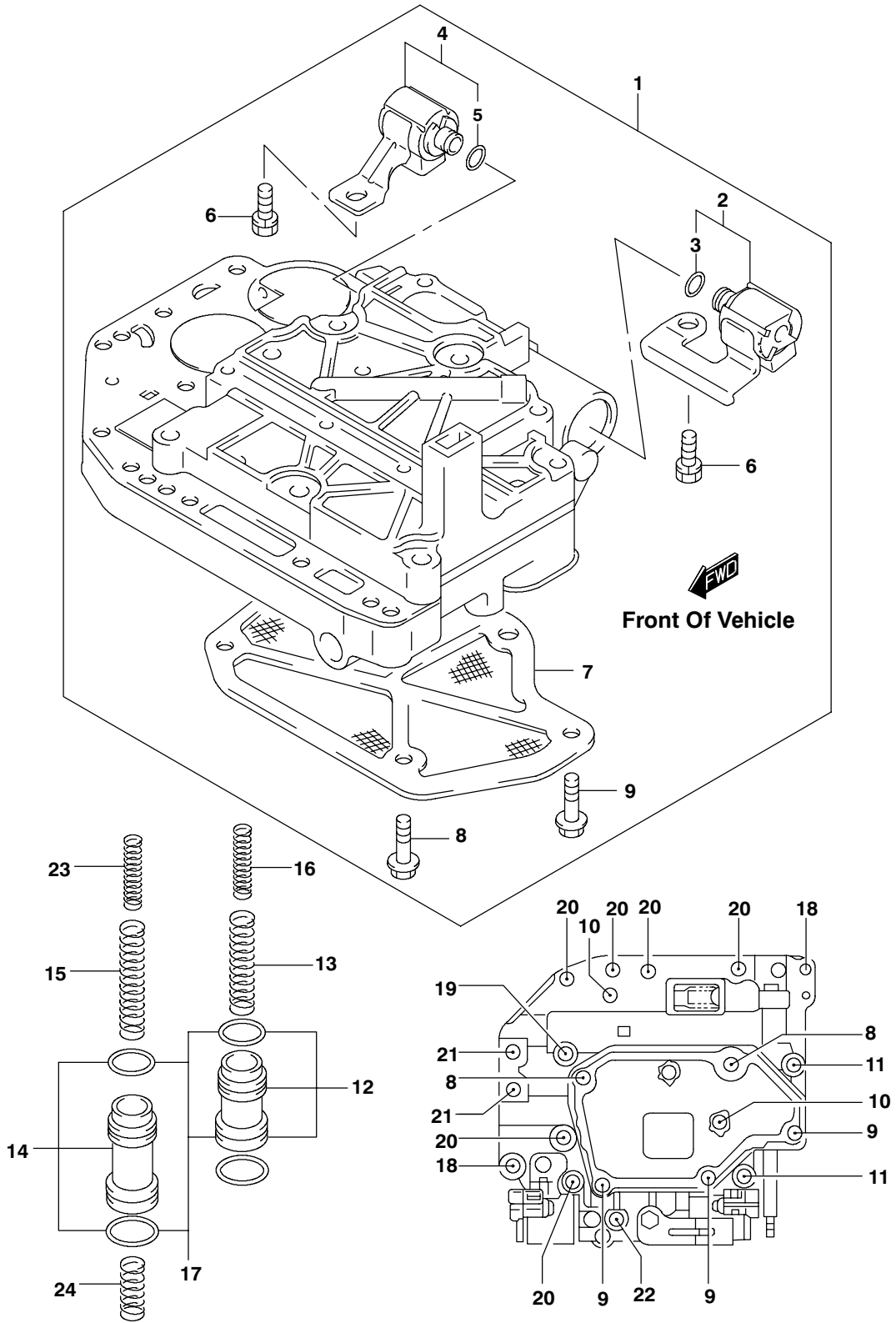
Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	2702796	Parking pawl set . . . . .	1	5	2702494	Nut . . . . .	1
2	2701921	Bolt . . . . .	3	6	2702799	Washer, manual shift shaft . . . . .	1
3	2702797	Shaft set, manual lever . . . . .	1	7	25951-67H10	Lever, manual shift . . . . .	1
4	2702798	Seal, shift shaft oil . . . . .	2				

## BRAKE BAND (AUTOMATIC TRANSMISSION) (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	2702800	Band set, 2nd brake	1	4	2702804	Cover set, 2nd brake piston	1
2	4120109	Piston AY, 2nd brake	1	5	2702805	Spring, 2nd brake piston	1
3	2702803	Sealing set, 2nd brake	1				

# TRANSMISSION VALVE (AUTOMATIC TRANSMISSION) (SUZUKI K6A)

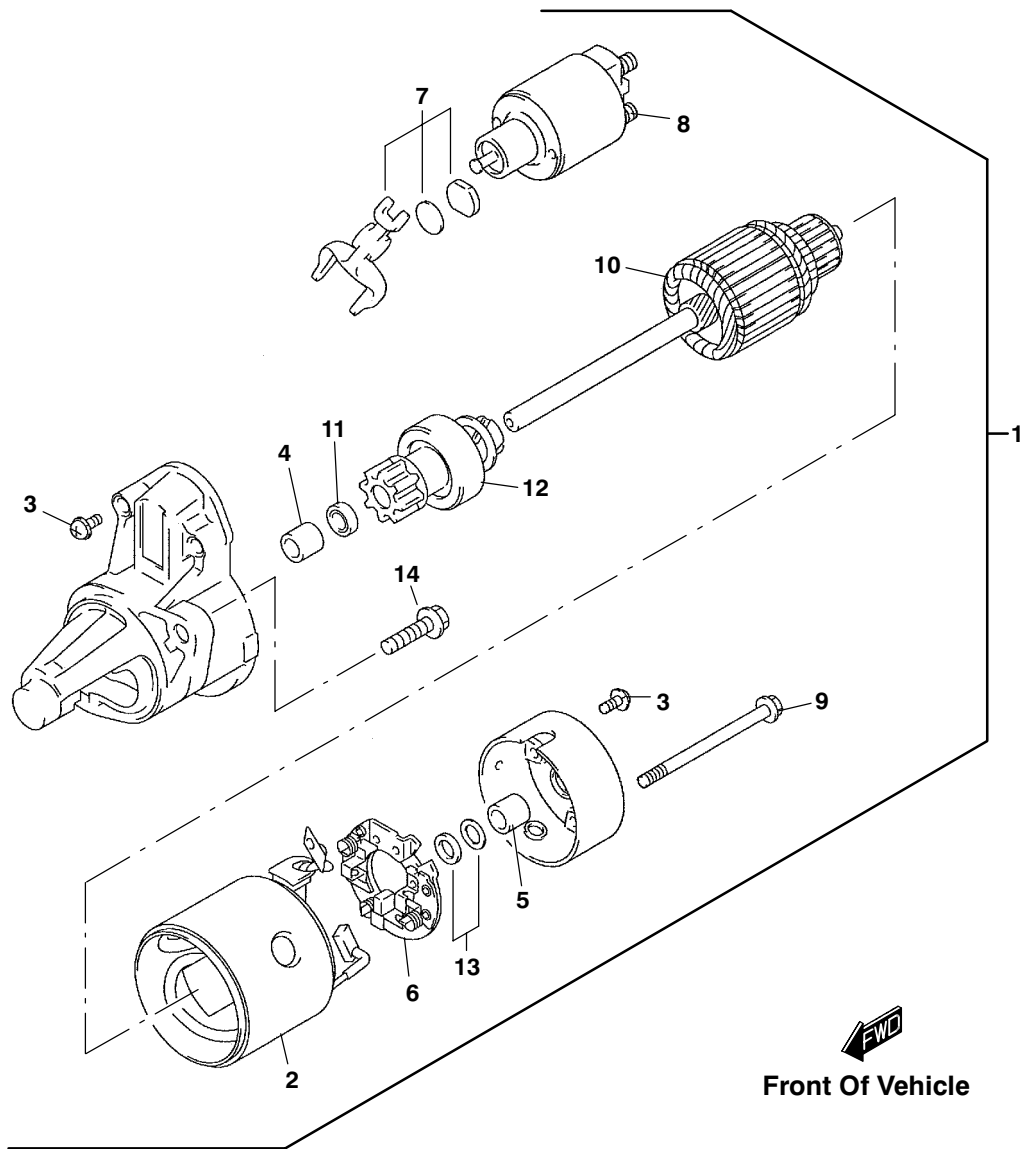


**TRANSMISSION VALVE  
(AUTOMATIC TRANSMISSION) (SUZUKI K6A)**

Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	
1	26500-60HH2	Body assembly				2nd brake position . . . . .	1
		transmission valve . . . . .	1	14	2702830	Piston set, B1 ACC . . . . .	1
2	2702822	Solenoid, direct clutch . . . .	1	15	2702831	Spring, ACC	
3	2702823	O-ring . . . . .	1			2nd brake position . . . . .	1
4	2702824	Solenoid assembly,		16	26563-67H30	Spring, ACC forward piston	1
		2nd brake position . . . . .	1	17	26533-67HT0	Seal ring set, accumulator	1
5	2702823	O-ring . . . . .	1	18	2702834	Bolt, valve body, No. 2 . . .	2
6	2702764	Bolt, solenoid . . . . .	2	19	2702835	Bolt, valve body, No. 3 . . .	1
7	2702825	Strainer, transmission oil . .	1	20	2702836	Bolt, valve body, No. 1 . . .	6
8	2702826	Bolt, valve body, No. 5 . . . .	2	21	2702837	Bolt, valve body, No. 4 . . .	2
9	2702827	Bolt, valve body, No. 6 . . . .	3	22	2702838	Bolt, valve body, No. 6 . . .	1
10	2702839	Bolt, valve body, No. 1 . . . .	2	23	2702841	Spring, ACC	
11	2702840	Bolt, valve body, No. 2 . . . .	2			2nd brake position No. 2 . .	1
12	26531-67HT0	Piston set, C1 ACC . . . . .	1	24	2702842	Spring, ACC	
13	26563-67H10	Spring, ACC				2nd brake position No. 3 . .	1



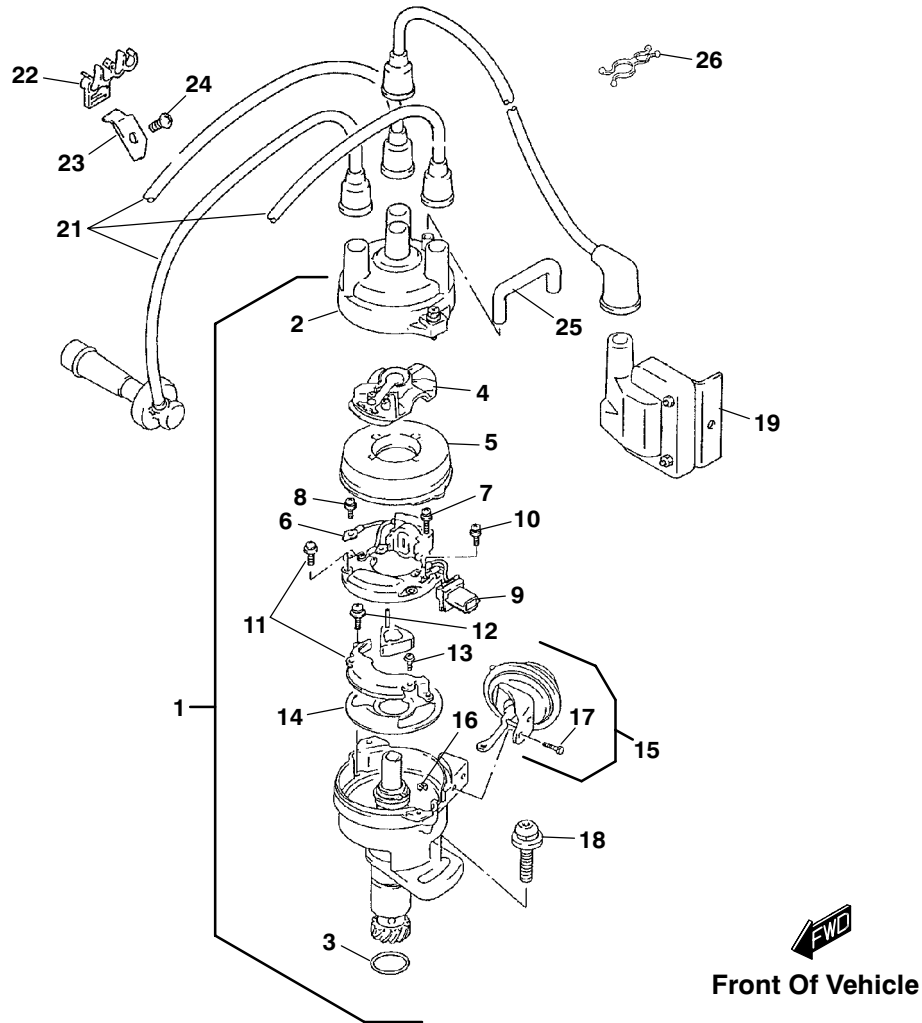
## STARTER (AUTOMATIC TRANSMISSION) (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	2702906	Motor assembly, starting	1	8	2702900	•Switch assembly	1
2	2702907	•Yoke assembly	1	9	2702908	•Bolt	2
3	2702895	•Screw assembly	1	10	2702909	•Armature	1
4	2702896	•Bushing	1	11	2702903	•Ring assembly	1
5	2702897	•Bushing	1	12	2702904	•Clutch assembly	1
6	2702898	•Holder assembly, brush	1	13	2702905	•Washer	1
7	2702899	•Lever assembly	1	14	2702470	•Bolt	2

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

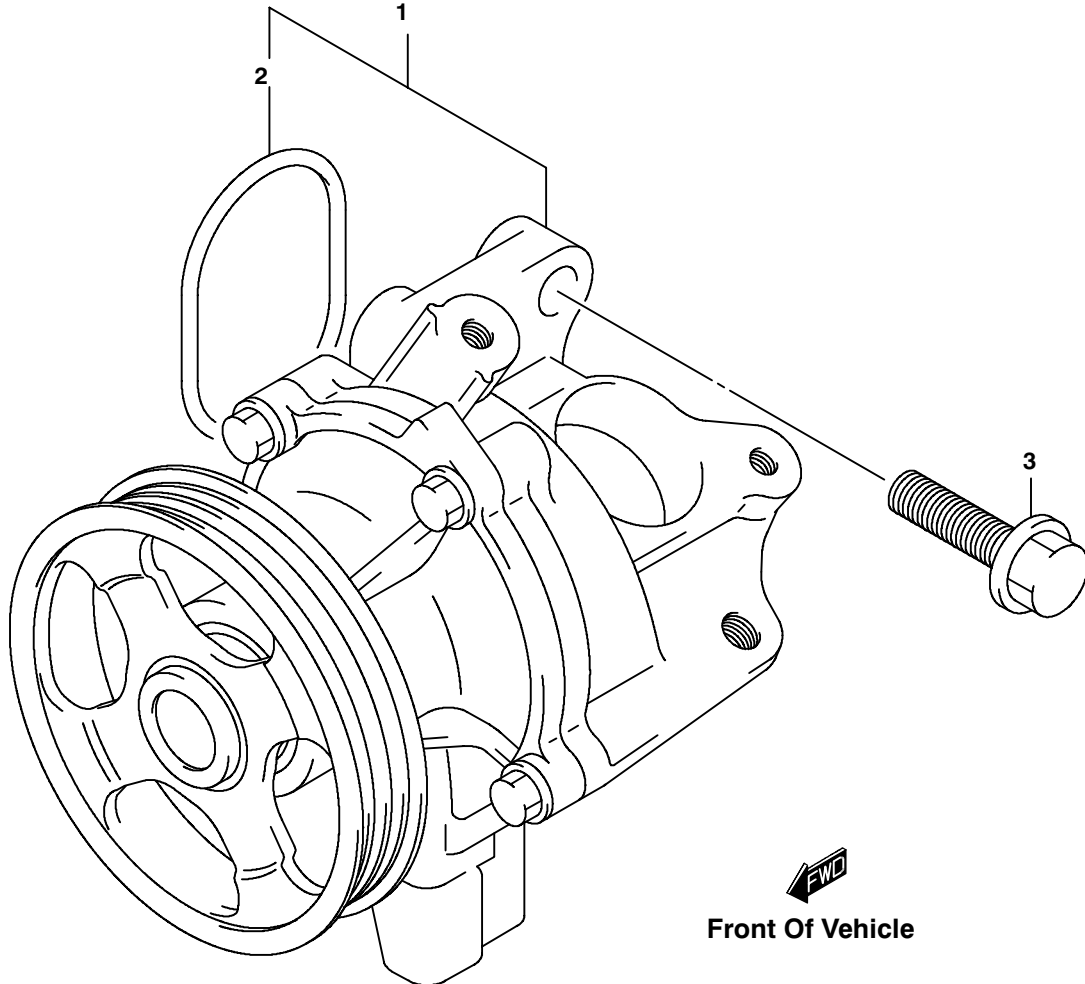
## DISTRIBUTOR (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	33100-51F11	Distributor, complete	1	14	33180-62D10	•Breaker assembly	1
2	33321-50F50	•Cap, distributor	1	15	33230-51F10	•Controller, vacuum	1
3	33278-85060	•O-ring	1	16	08332-11033	••E-ring	1
4	33310-51F10	•Rotor	1	17	33151-60B40	••Screw	2
5	33326-51F10	•Shield, dust	1	18	09138-08003	Screw	1
6	33140-64B70	•Coil, pick-up	1	19	33410-50F20	Coil, ignition	1
7	33151-86240	•Screw	2	20	33710-60C21	Cord, high tension (No. 1)	1
8	33152-64B70	•Screw	2	21	33705-60C11	Cord set, high tension	1
9	33375-62D10	•Connector	1	22	33884-86510	Clamp	1
10	33152-64B70	•Screw	2	23	33881-60C11	Bracket	1
11	33370-76D20	•Igniter assembly	1	24	02112-06083	Screw	1
12	02112-34103	••Screw	2	25	33460-50F30	Hose, distributor cap	1
13	33187-50F10	••Screw	2	26	09408-00013	Clip	1

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

## WATER PUMP (SUZUKI K6A)

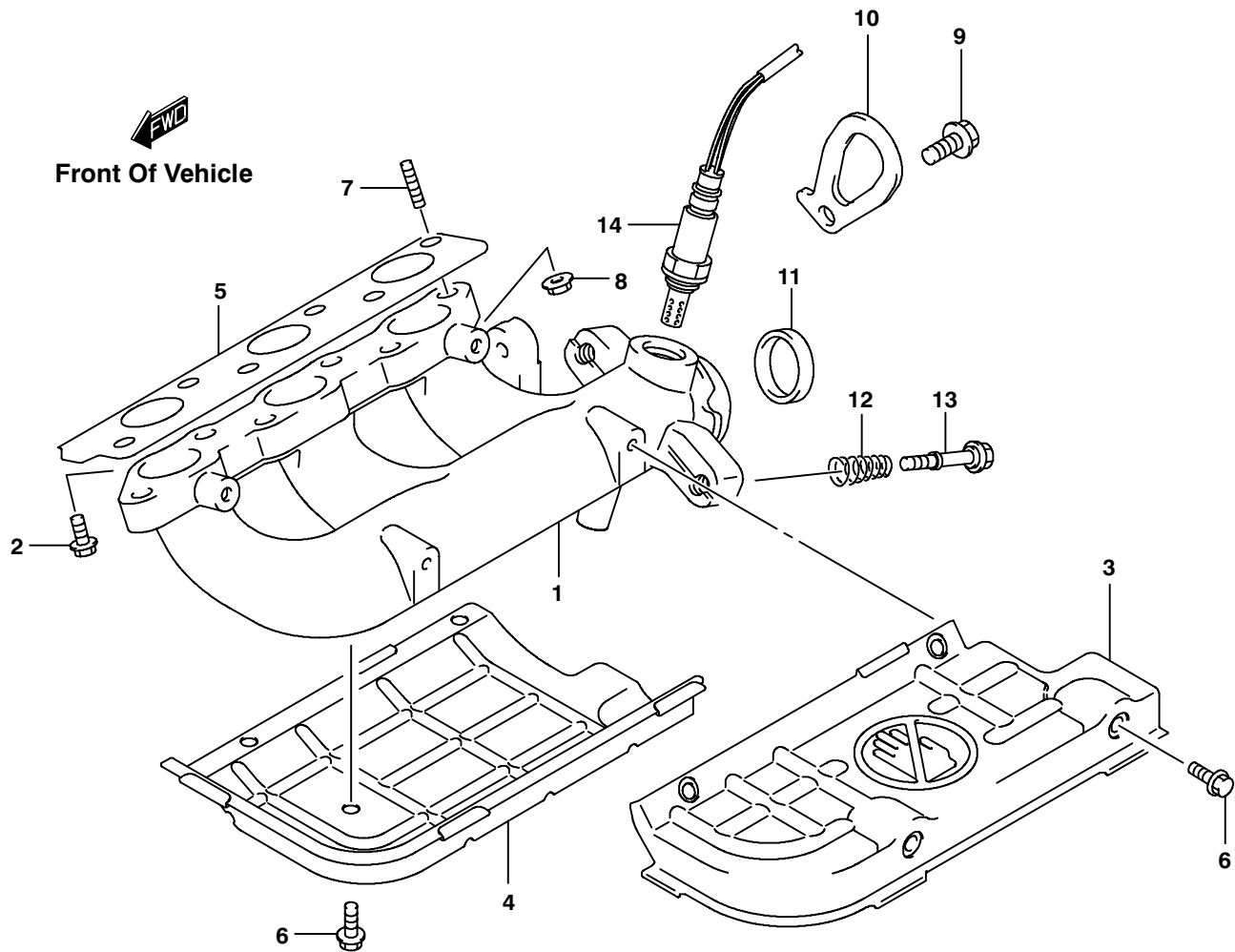


Ref. No.	Part No.	Description	No. Req'd	Notes
1	4120074	Pump, water .....	1	
2	4119965	•O-ring .....	1	
3	2702470	Bolt .....	4	

• INDENTED PARTS NAME INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.

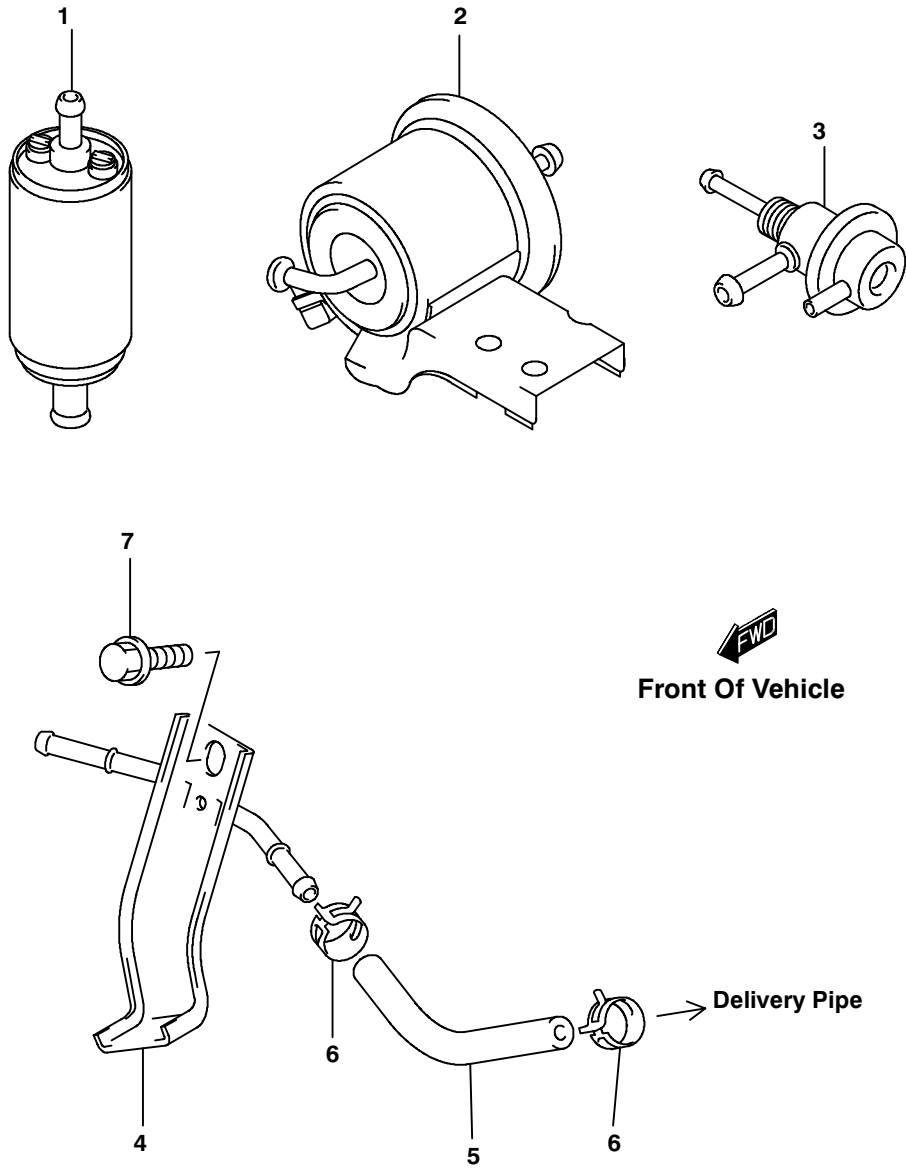


## EXHAUST MANIFOLD (SUZUKI K6A)



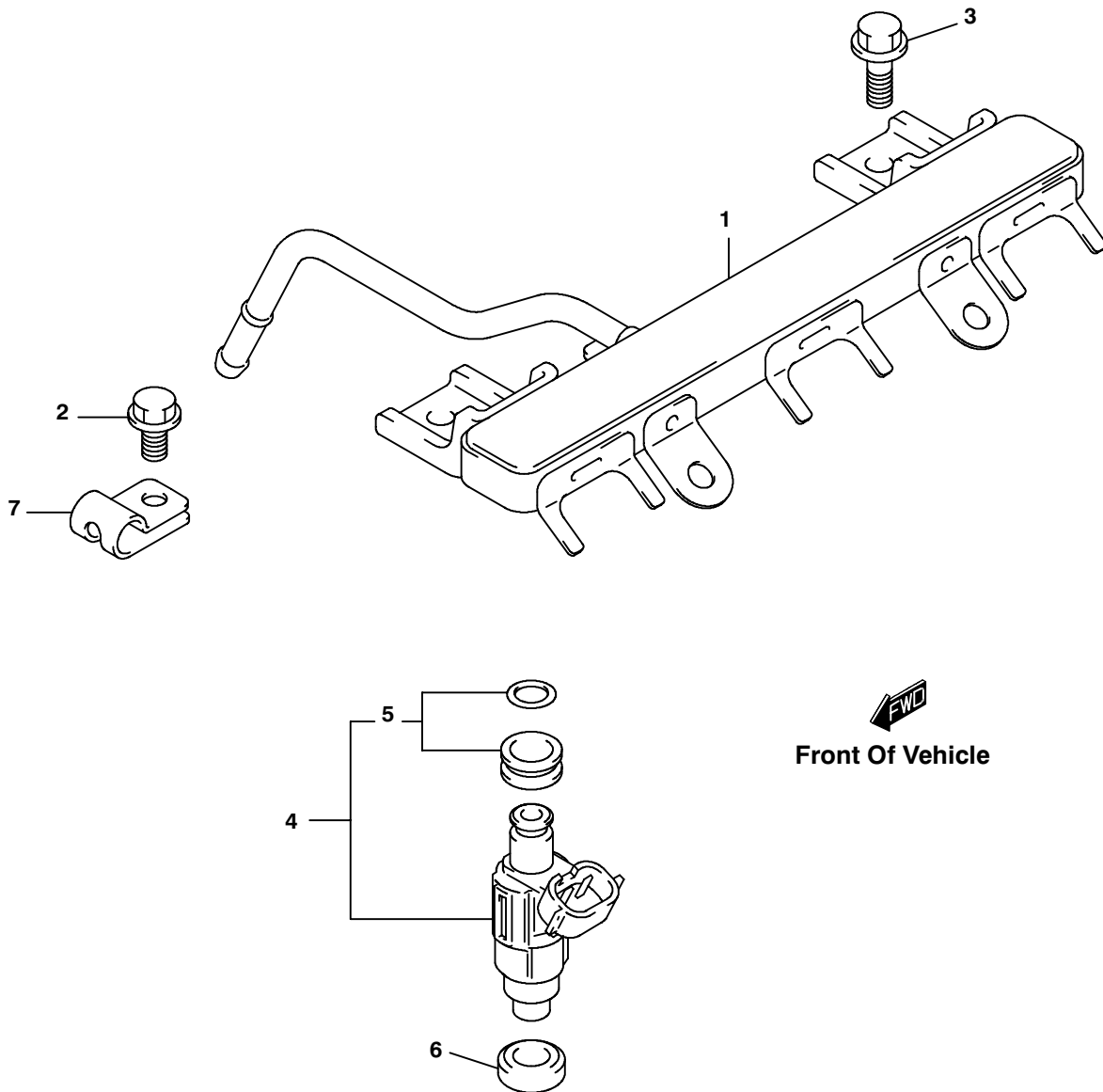
Ref. No.	Part No.	Description	No. Req'd	Notes
1	1411-67H00	Exhaust manifold . . . . .	1	
2	14118-70650	Bolt . . . . .	2	
3	4120060	Cover, exhaust manifold upper . . . . .	1	
4	4120061	Cover, exhaust manifold lower . . . . .	1	
5	1414-83G00	Gasket . . . . .	1	
6	2702499	Bolt (6 X 12) . . . . .	8	
7	4120063	Stud bolt . . . . .	4	
8	4120064	Nut . . . . .	4	
9	2702475	Bolt . . . . .	1	
10	2702759	Engine hook . . . . .	1	
11	2702500	Ring, seal exhaust pipe . . . . .	1	
12	2702501	Spring, exhaust pipe . . . . .	2	
13	2702502	Bolt (10 x 65) . . . . .	2	
14	4120065	Sensor, oxygen . . . . .	1	

## FUEL PUMP (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Notes
1	2701897	Fuel pump assembly .....	1	
2	2701898	Fuel filter .....	1	
3	2701899	Regulator Assembly .....	1	
4	5830-65H51	Fuel feed pipe .....	1	
5	5835-65H00	Fuel feed hose .....	1	
6	4120066	Fuel hose clip .....	2	
7	2702475	Bolt .....	2	

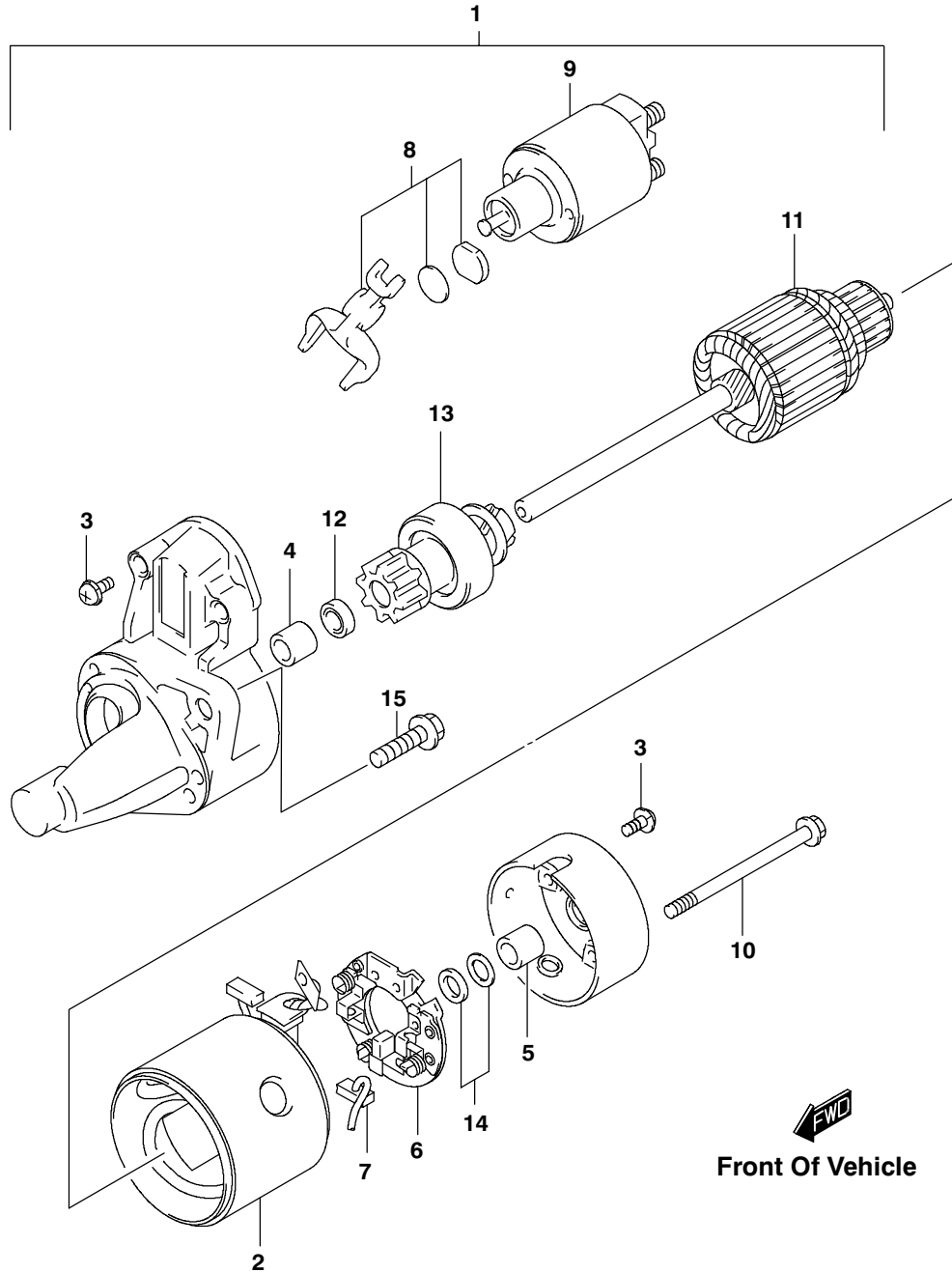
## DELIVERY PIPE (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Notes
1	4120067	Delivery pipe .....	1	
2	2702486	Bolt .....	1	
3	2701978	Bolt .....	2	
4	15710-65H00	Injector assembly, fuel .....	3	
5	2702512	•Grommet set .....	3	
6	2702513	Cushion .....	3	
7	2702514	Clamp .....	1	

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.

## STARTER (MANUAL TRANSMISSION) (SUZUKI K6A)

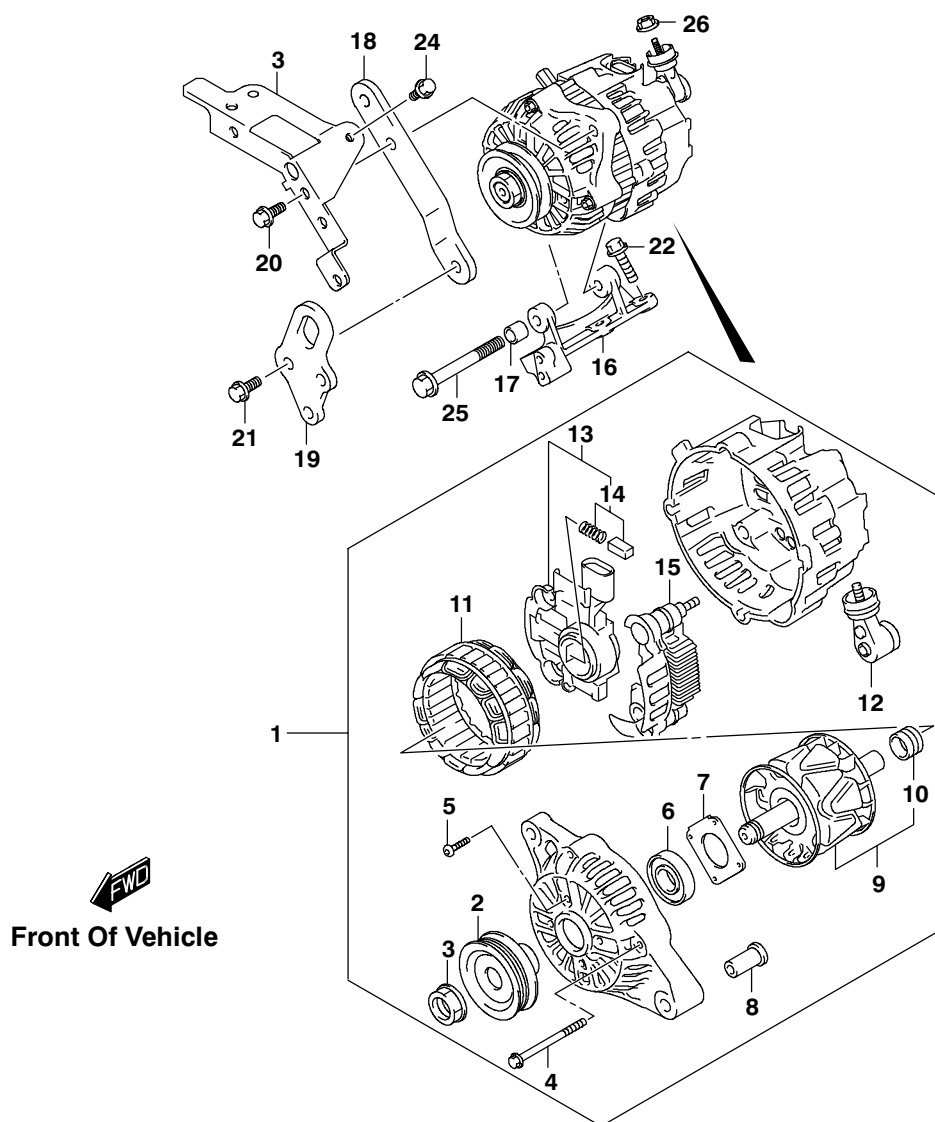


Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	2702893	Motor assembly, starting ..	1	9	2702900	•Switch assembly .....	1
2	2702894	•Yoke assembly .....	1	10	2702901	•Bolt .....	1
3	2702895	•Screw assembly .....	1	11	2702902	•Armature .....	1
4	2702896	•Bushing .....	1	12	2702903	•Ring assembly .....	1
5	2702897	•Bushing .....	1	13	2702904	•Clutch assembly .....	1
6	2702898	•Holder assembly brush ..	1	14	2702905	•Washer .....	1
7	31132-80090	••Brush (-) .....	1	15	2702470	•Bolt .....	2
8	2702899	•Lever assembly .....	1				

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY



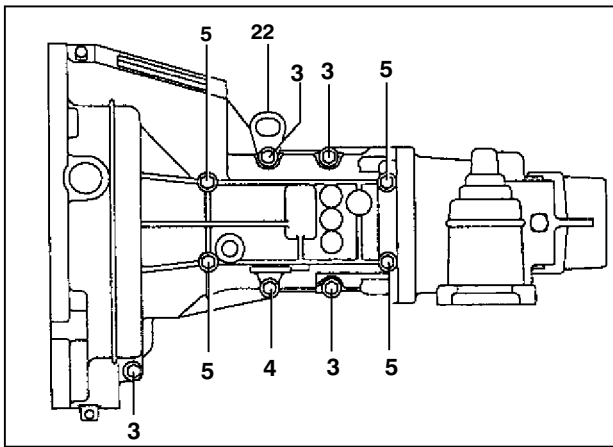
## GENERATOR (SUZUKI K6A)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	4120119	Generator assembly	1	14 *	4119616	••Brush set	1
2	4120120	•Pulley	1	15 *	4120129	•Rectifier assembly	1
3	4119681	•Nut, pulley	1	16 *	11551-65H00	Bracket, generator	1
4	4119617	•Screw set	1	17 *	11555-60G00	Bushing, generator mounting	1
5	4120121	•Screw	1	18 *	4120130	Arm, generator	1
6	4120122	•Bearing	1	19	11851-65H00	Hook, engine	1
7	4120123	•Retainer, bearing	1	20	4119603	Bolt	1
8 *	4120124	•Bushing	1	21	2701827	Bolt	1
9	4120125	•Rotor assembly	1	22	2702469	Bolt, generator bracket	3
10 *	4119615	••Bearing, rear	1	23	31614-65H20	Bracket, generator cover	1
11 *	4120126	•Starter assembly	1	24	2702486	Bolt	1
12 *	4120127	•Terminal set	1	25	4120131	Bolt	1
13 *	4120128	•Regulator	1	26	2701914	Nut	1

\*INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY.  
Not Illustrated

# TRANSMISSION CASE (MANUAL) (SUZUKI K6A)

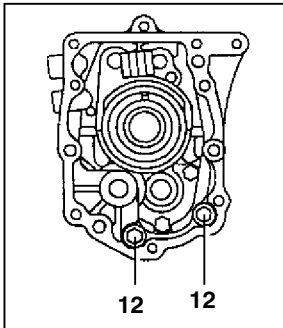
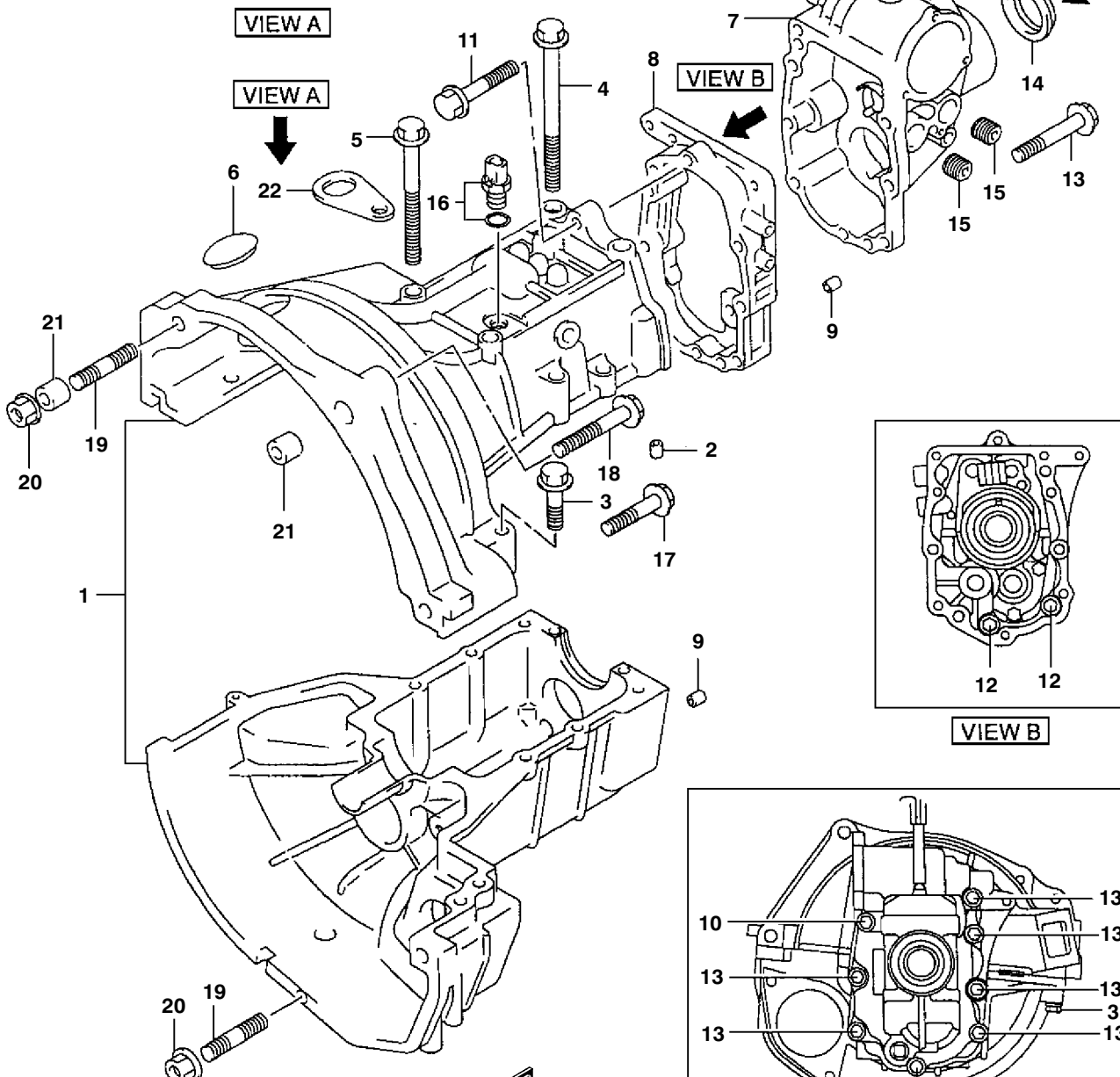


VIEW A

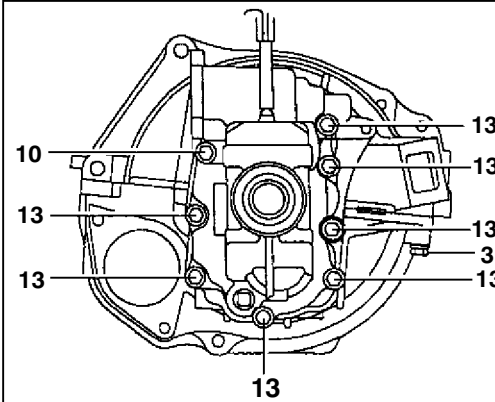
VIEW A

VIEW B

VIEW C



VIEW B



VIEW C



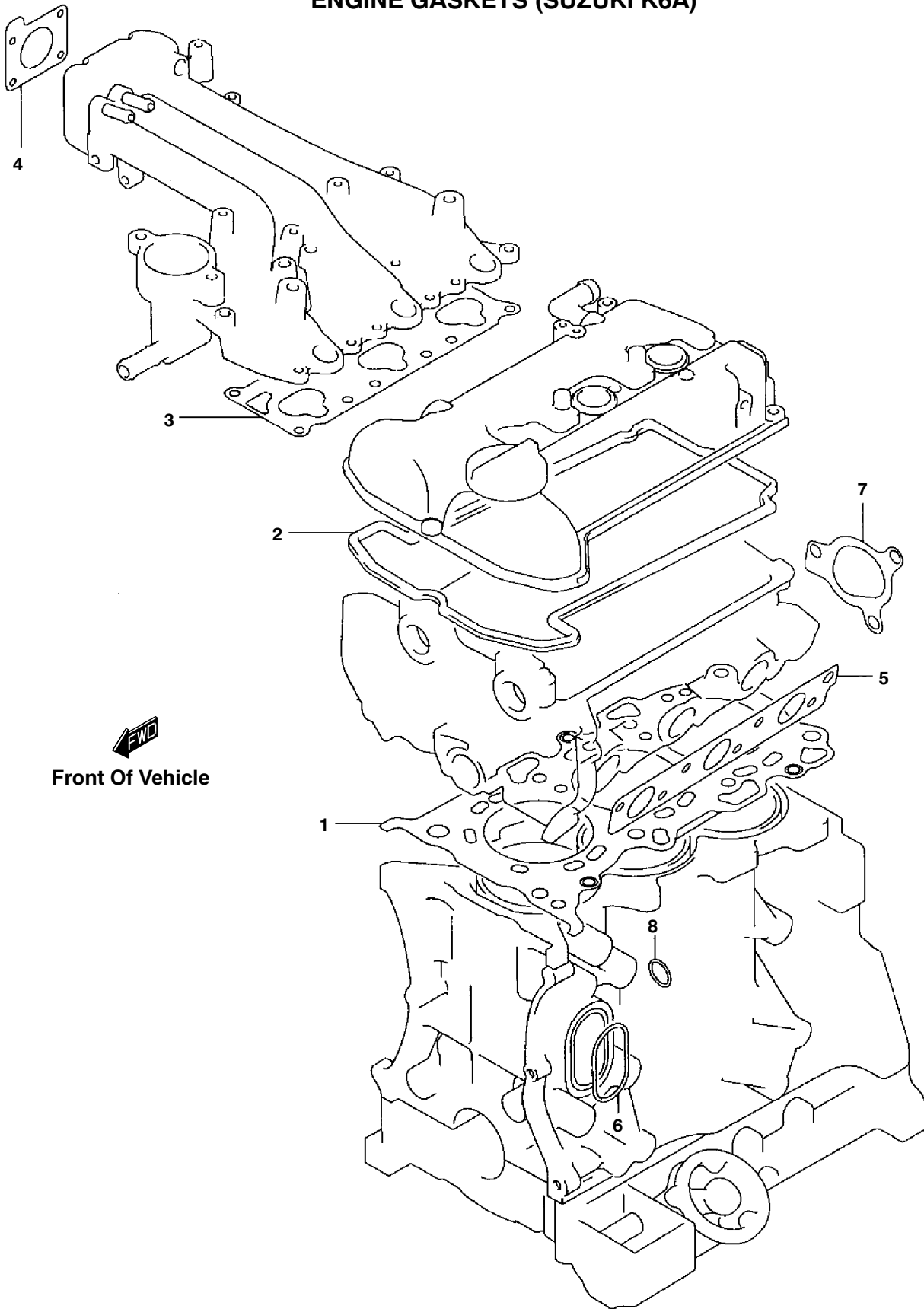
Front Of Vehicle

**TRANSMISSION CASE (MANUAL)  
(SUZUKI K6A)**

Ref. No.	Part No.	Description	No. Req'd	Notes
1	4120094	Case, transmission .....	1	
2	2702658	•Pin, 9 x 16 .....	2	
3	2702659	•Bolt .....	5	
4	2702660	•Bolt, crankcase .....	1	
5	2702661	•Bolt .....	4	
6	2702662	Cap .....	1	
7	2702663	Case, extension No. 1 .....	1	
8	2702664	Case, extension No. 2 .....	1	
9	2702658	Pin .....	4	
10	2702665	Bolt, 8 x 120 .....	1	
11	2702470	Bolt .....	1	
12	2702659	Bolt .....	2	
13	2702660	Bolt .....	7	
14	2702683	Seal, extension case oil .....	1	
15	2702684	Plug .....	2	
16	2702685	Switch, back up lamp .....	1	
17	2702686	Bolt .....	1	
18	2702687	Bolt .....	1	
19	2702688	Stud bolt .....	2	
20	2702689	Nut .....	2	
21	2702690	Pin .....	2	
22	2702691	Hook, engine .....	1	
23	2702692	Plug, breather .....	1	
24	2702693	Hose .....	1	
25	2702694	Union, breather .....	1	

•INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY.

# ENGINE GASKETS (SUZUKI K6A)

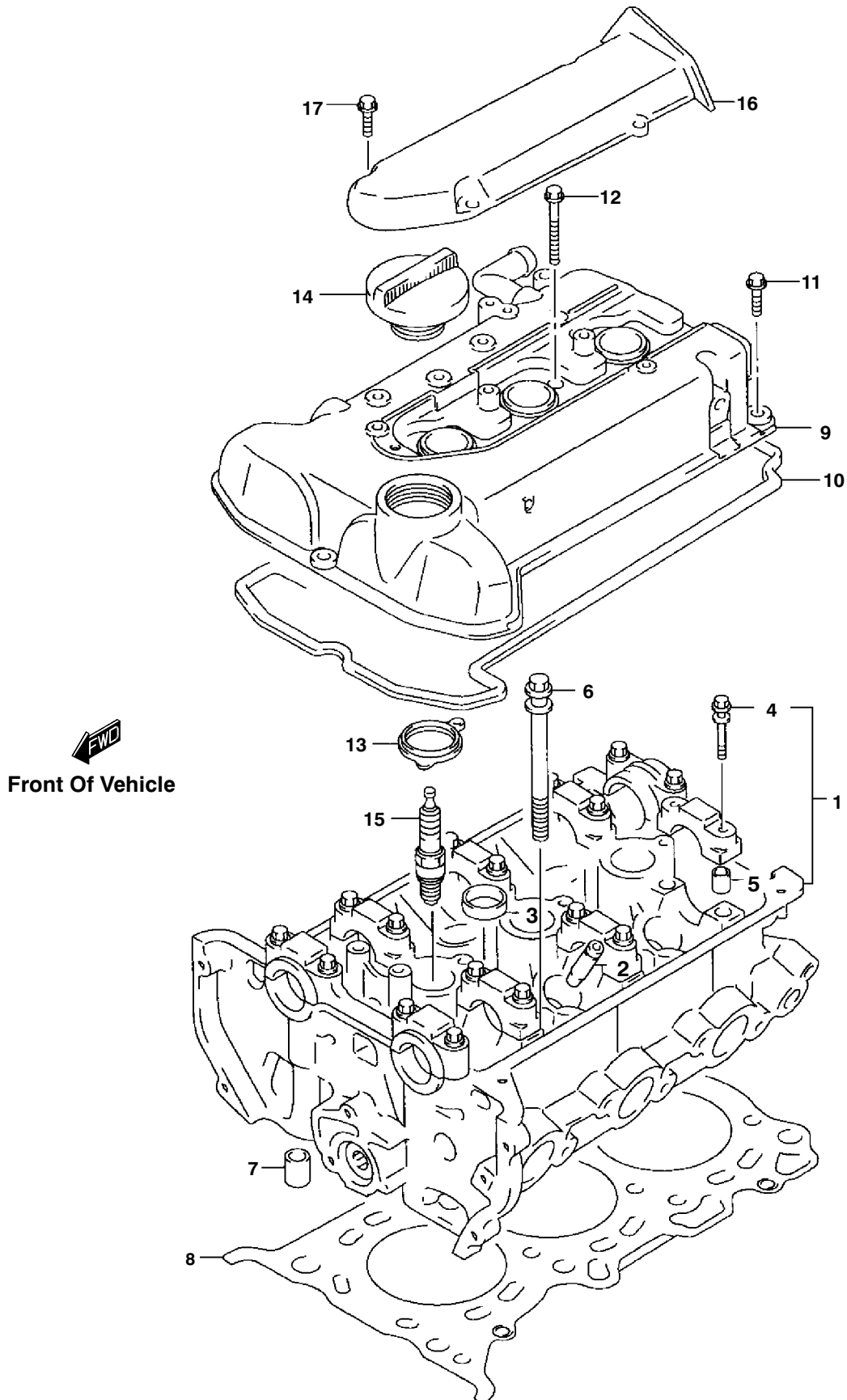


## ENGINE GASKETS (SUZUKI K6A)

Ref. No.	Part No.	Description	No. Req'd	Notes
1	4119954	Gasket set, engine .....	1	
2	4119957	•Gasket, cylinder head .....	1	
3	4119958	•Gasket, cylinder head cover .....	1	
4	4119959	•Gasket, intake manifold .....	1	
5	2701803	•Gasket, throttle body .....	1	
6	4119960	•Gasket, exhaust manifold .....	1	
7	4119965	•O-ring, water pump .....	1	
8	4119967	•Gasket, thermostat case .....	1	
8	4119609	•O-ring, water inlet pipe .....	1	

•INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY.

# CYLINDER HEAD and COMPONENTS (SUZUKI K6A)

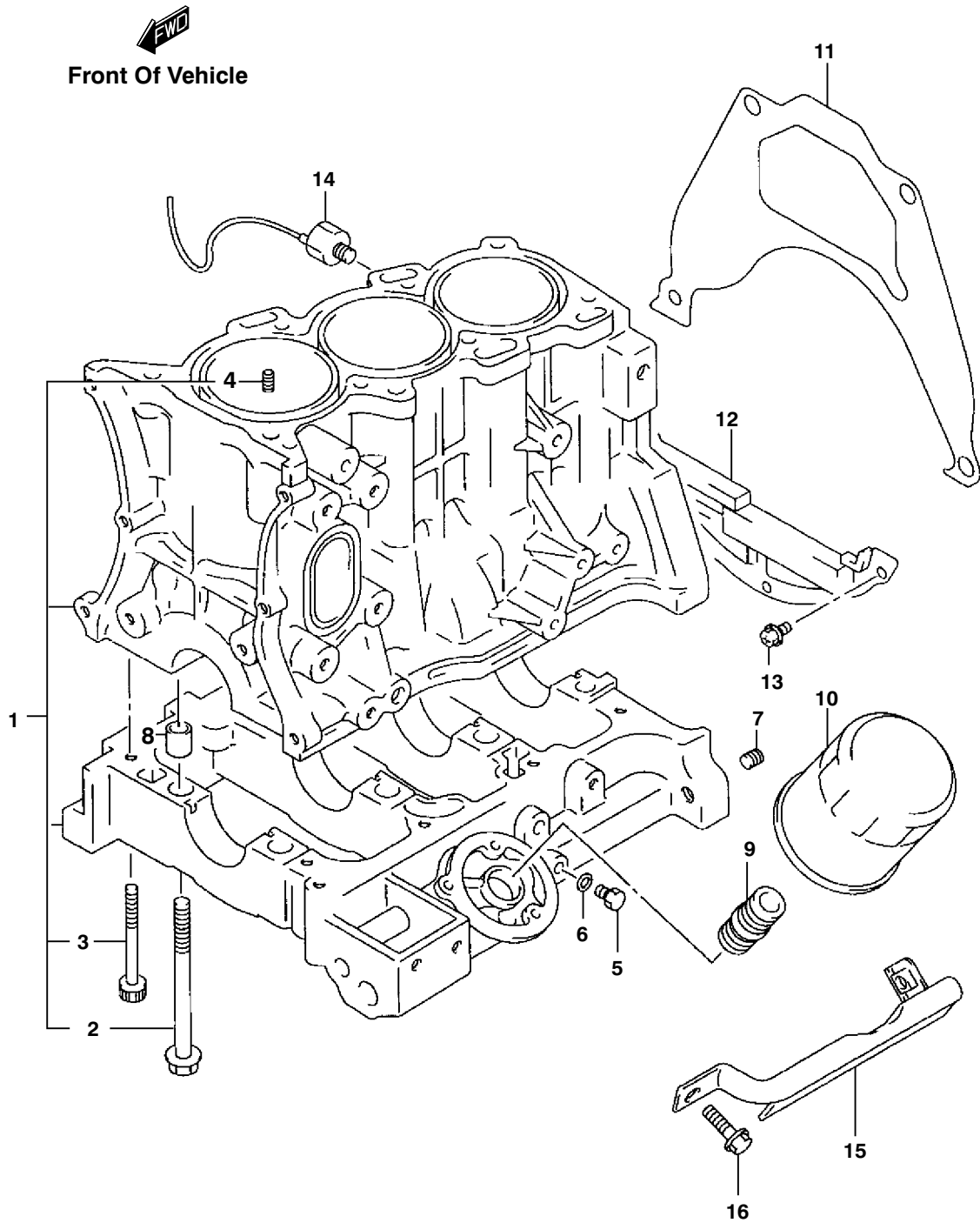


## CYLINDER HEAD and COMPONENTS (SUZUKI K6A)

Ref. No.	Part No.	Description	No. Req'd	Notes
1	4119962	Head, cylinder .....	1	
2	4119963	•Guide, valve .....	12	
3	2701816	•Plug .....	2	
4	4119964	•Bolt .....	17	
5	2701821	•Pin .....	14	
6	4119956	Bolt, cylinder head .....	8	
7	4119966	Pin .....	2	
8	4119957	Gasket, cylinder head .....	1	
9	4119968	Cover, cylinder head .....	1	
10	4119958	Gasket, head upper cover .....	1	
11	4119970	Bolt .....	5	
12	4119971	Bolt .....	1	
13	4119972	Gasket, spark plug hole .....	3	
14	4119973	Cap, oil filler .....	1	
15	4119606	Spark plug .....	3	NGK, 3932
16	4117894	Cover, cylinder head, upper .....	1	
17	4117892	Bolt .....	4	

•INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY.

# CYLINDER BLOCK and COMPONENTS (SUZUKI K6A)



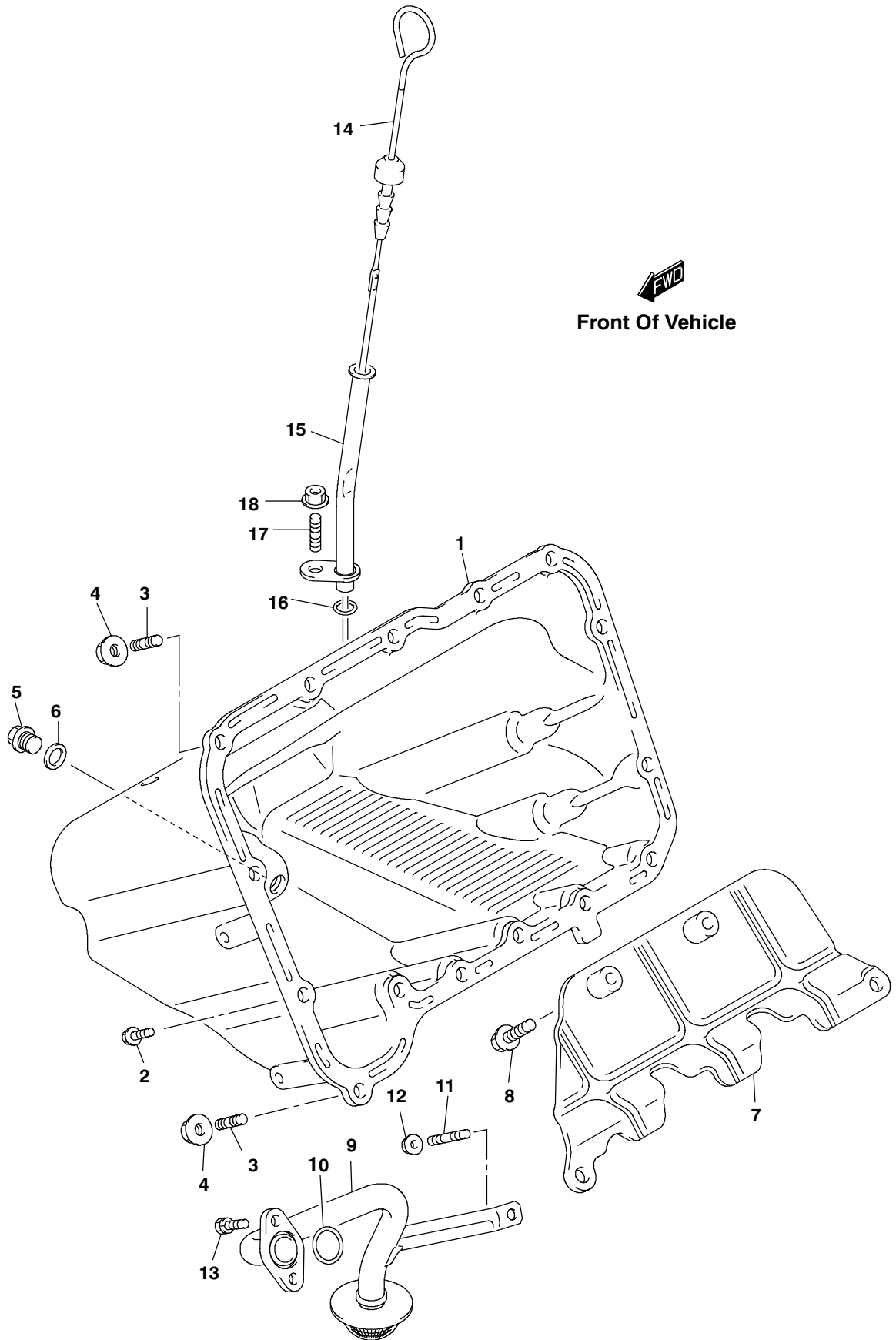


## CYLINDER BLOCK and COMPONENTS (SUZUKI K6A)

Ref. No.	Part No.	Description	No. Req'd	Notes
1	4119974	Block, cylinder .....	1	
2	4119956	•Bolt, crankcase .....	8	
3	4120006	•Bolt, crankcase No. 2 .....	8	
4	4119607	•Plug, oil venturi .....	1	
5	4120007	•Plug, oil gallery No. 2 .....	1	
6	4120008	•Gasket, oil gallery plug .....	1	
7	4119604	•Plug, oil gallery .....	1	
8	2701824	Pin .....	4	
9	4120009	Stand, oil filter .....	1	
10	2701908	Filter, oil .....	1	
11	2701840	Plate, clutch housing upper .....	1	Manual transmission
12	4117895	Plate, clutch HSG .....	1	Manual transmission
13	2702537	Bolt .....	2	Manual transmission
14	4120010	Sensor, knock .....	1	
15	4117899	Guard, oil filter .....	1	
16	2701827	Bolt .....	2	

•INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY.

# OIL PAN and DIPSTICK (SUZUKI K6A)

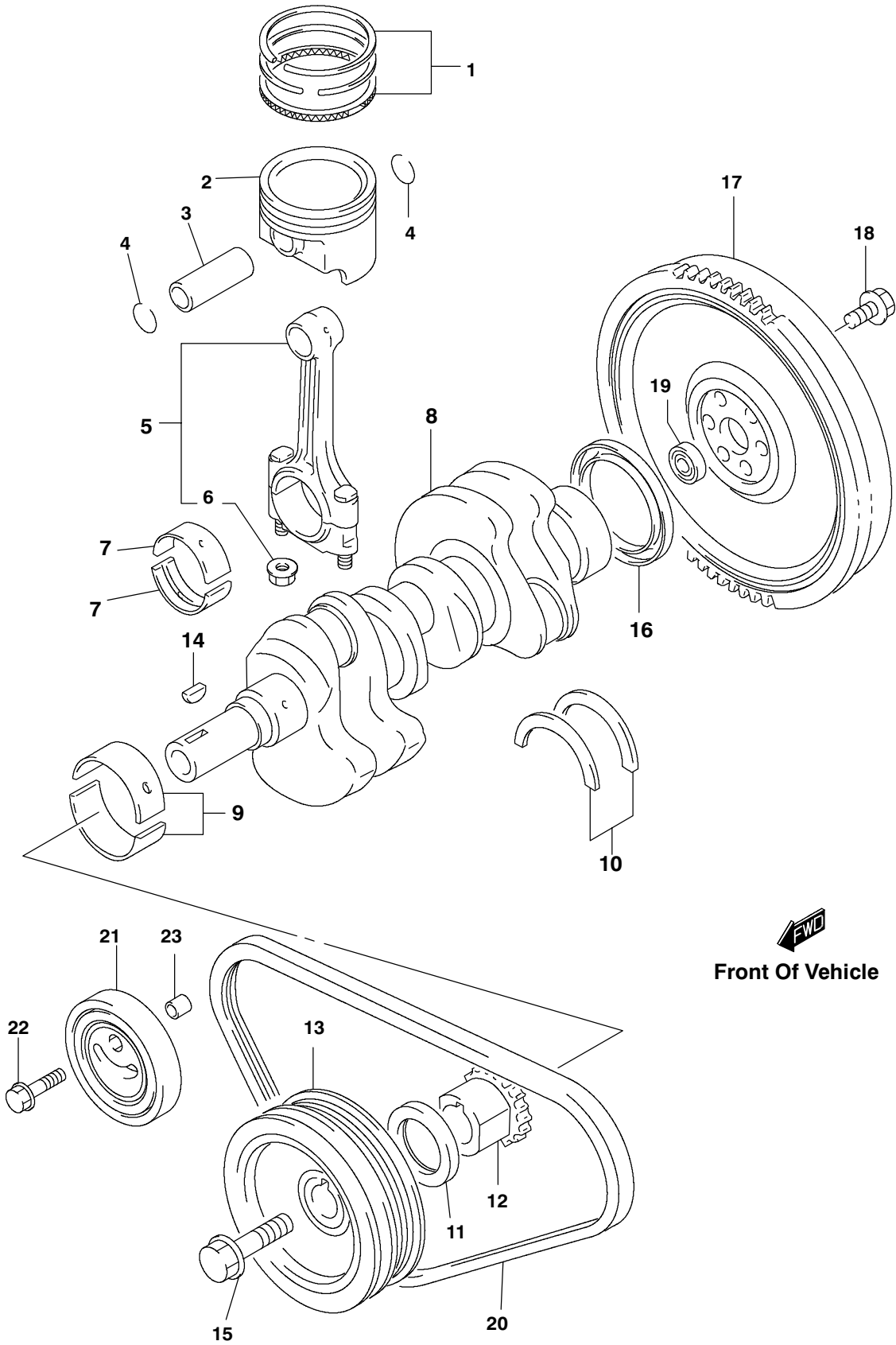


## OIL PAN and DIPSTICK (SUZUKI K6A)

Ref. No.	Part No.	Description	No. Req'd	Notes
1	4120011	Pan, oil .....	1	
2	4120012	Bolt (6 x 16) .....	12	
3	4120013	Stud bolt .....	1	
4	2701914	Nut .....	3	
5	2701915	Plug, drain .....	1	
6	2701916	Gasket, drain plug .....	1	
7	4117897	Plate, oil pan baffle .....	1	
8	2702486	Bolt .....	11	
9	4119975	Strainer, oil pump .....	1	
10	2701920	O-ring .....	1	
11	4120014	Stud bolt .....	2	
12	2701914	Nut .....	1	
13	2701921	Bolt .....	2	
14	4119976	Gauge, oil level .....	1	
15	4119977	Guide, gauge .....	1	
16	4119605	O-ring .....	1	
17	4120015	Stud bolt .....	1	
18	2701914	Nut .....	1	

•INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN PRECEDING ASSEMBLY.

**CRANKSHAFT, FLYWHEEL and PISTONS (SUZUKI K6A)**



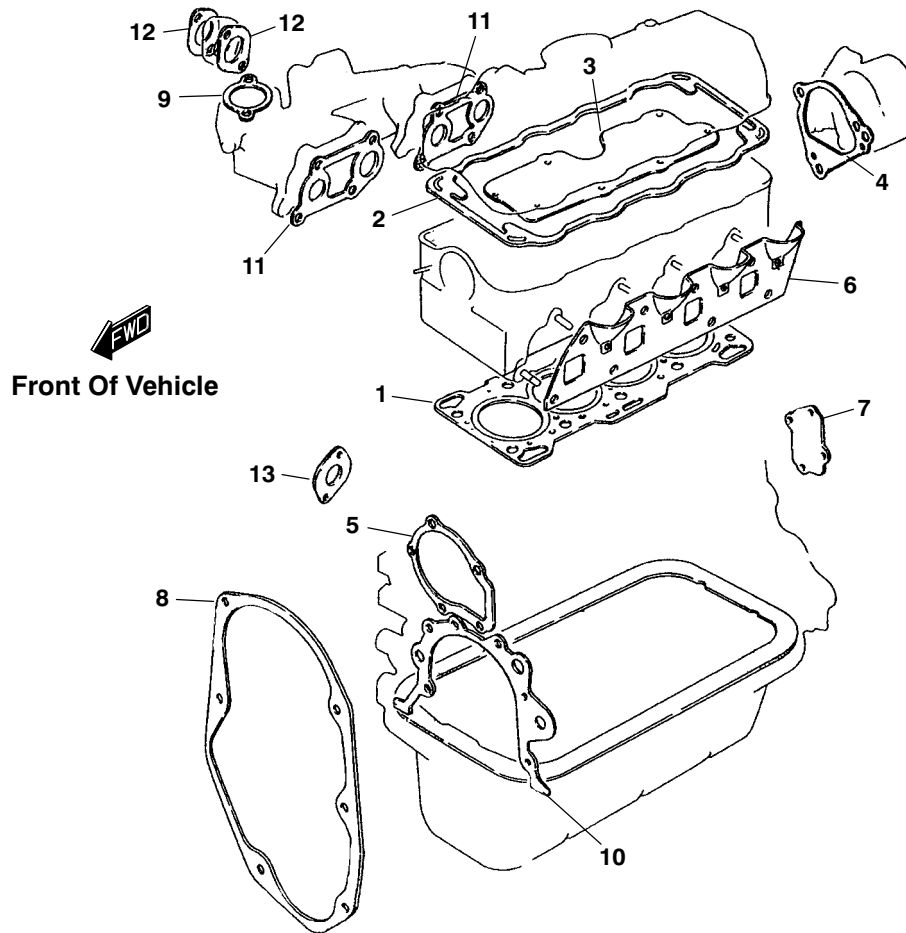
**Front Of Vehicle**

## CRANKSHAFT, FLYWHEEL and PISTONS (SUZUKI K6A)

Ref. No.	Part No.	Description	No. Req'd	Notes
1	4119978	Ring set, piston .....	3	Standard
	4119979	Ring set, piston .....	3	OS:0.50
2	4119980	Piston .....	3	Standard, Mark 1
	4119981	Piston .....	3	Standard, Mark 2
	4119982	Piston .....	3	OS:0.50
3	4119983	Pin, piston .....	3	
4	4119984	Circlip .....	6	
5	4119985	Rod, connecting .....	3	
6	2701931	•Nut .....	2	
7	4119608	Bearing set, connecting rod .....	6	
8	4119986	Crankshaft .....	1	
9	4119987	Bearing set, crankshaft .....	4	Green
	4119988	Bearing set, crankshaft .....	4	Black
	4119989	Bearing set, crankshaft .....	4	Non color
	4119990	Bearing set, crankshaft .....	4	Yellow
	4119991	Bearing set, crankshaft .....	4	Brown
10	2701937	Bearing set, crank thrust .....	1	Standard
	2701938	Bearing set, crank thrust .....	1	OS, T:2.563
11	2701955	Seal, crankshaft front oil .....	1	
12	4120019	Sprocket, crank timing .....	1	
13	4120020	Pulley, crankshaft .....	1	
14	4120021	Key .....	1	
15	4120022	Bolt .....	1	
16	4120023	Seal, oil .....	1	
17	4120024	Flywheel .....	1	Manual transmission
18	4119955	Bolt, 10 x 18.5 .....	6	Manual transmission
19	2701952	Bearing, input shaft .....	1	Manual transmission
20	4120026	Water pump belt .....	1	
21	4120027	Tensioner .....	1	
22	4120028	Bolt .....	2	
23	4120029	Pin .....	1	

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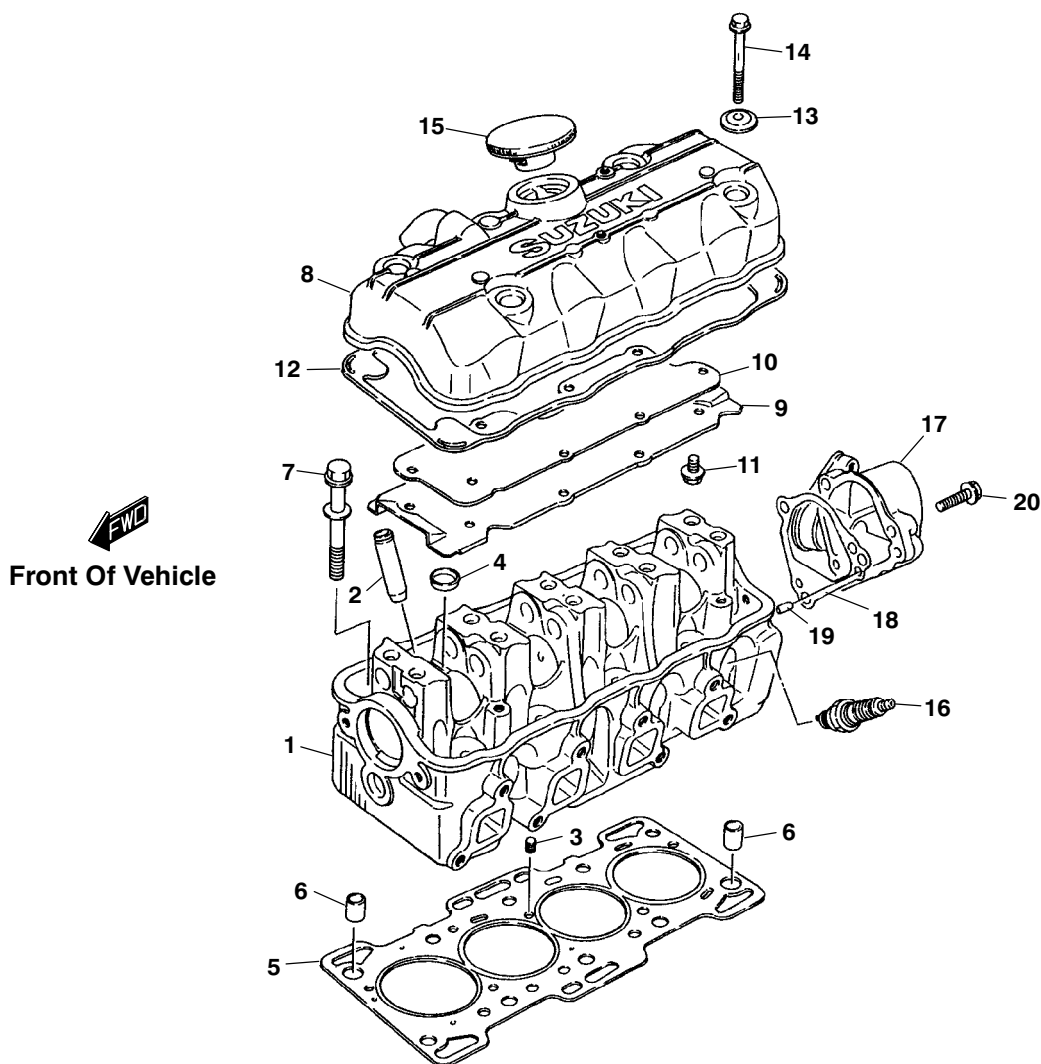
## ENGINE GASKETS (SUZUKI 970)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	11401-85893	Gasket set, complete . . . . .	1	7	11229-73000	•Gasket, cylindr. block plate	1
	11141-75120	•Gasket, head . . . . .	1	8	11399-73010	•Gasket, timing belt cover .	1
2	11189-73004	•Gasket, valve cover . . . . .	1	9	17569-60A10	•Gasket, thermostat cap . .	1
3	11173-73001	•Gasket, breather plate . . .	1	10	16119-76G00	•Gasket, oil pump case . . .	1
4	11169-70D00	•Gasket, distributor case . .	1	11	13119-73001-H17	•Gasket, intake man. . .	2
5	17431-73001	•Gasket, water pump . . . . .	1	12	13125-80000-H17	•Gasket, carburetor . .	2
6	14140-85200	•Gasket, exhaust man. . . .	1	13	17559-73000-H17	•Gasket, water inlet . .	1

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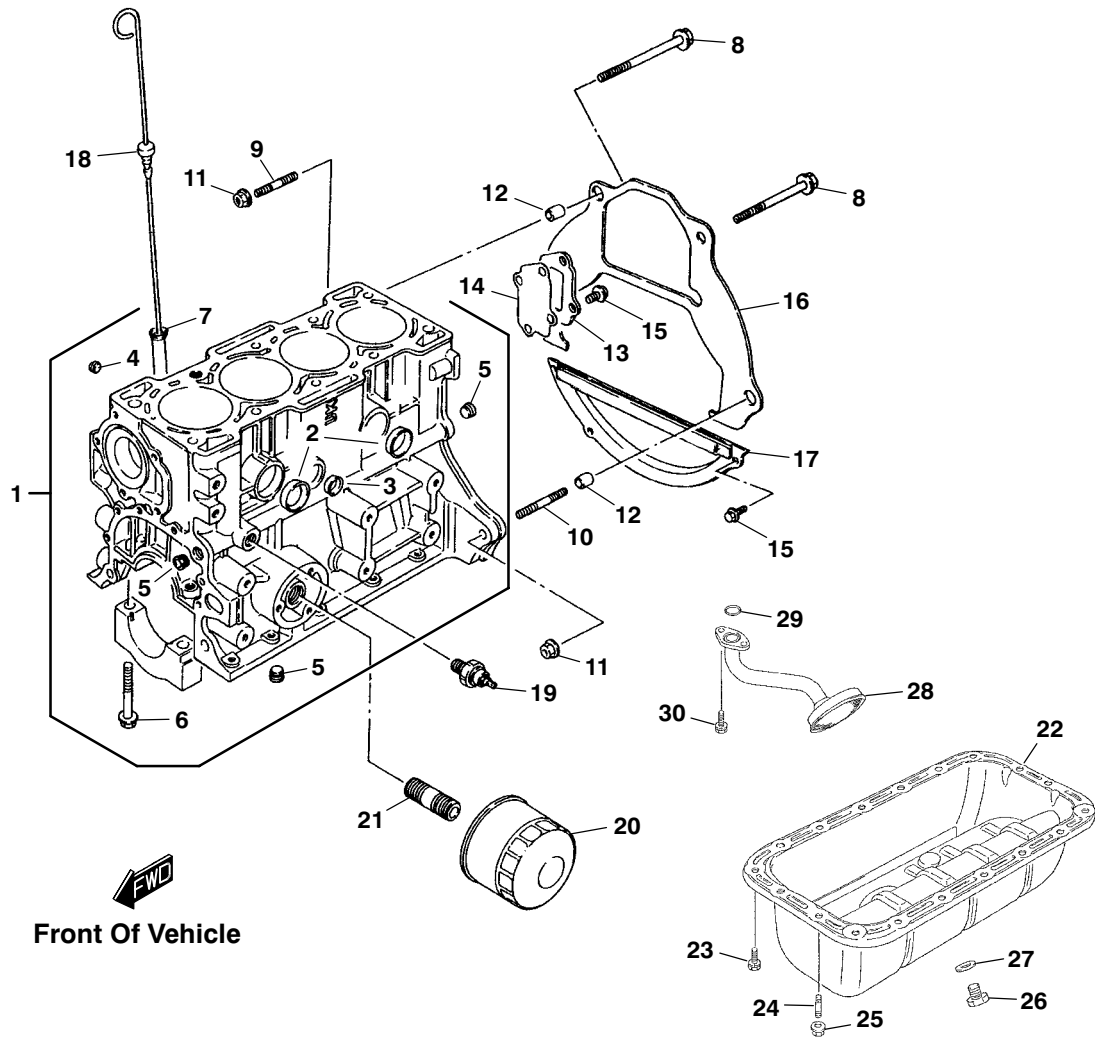
## CYLINDER HEAD and COMPONENTS (SUZUKI 970)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	11110-80002	Head, cylinder	1	13	11180-82010	Grommet, head cover	4
2	11115-82000-001	•Guide, valve	8	14	09103-06134	Bolt (6 x 65)	4
3	11112-73002	•Plug, oil venturi	1	15	16920-86502	Cap, oil filler	1
4	09241-20006	•Plug	5	16	09482-00123	Plug, spark W16EX-U, Denso	4
5	11141-75120	Gasket, cylinder head	1	<b>or</b>	09482-00131	Plug, spark BP5ES, NGK	4
6	04211-13189	Pin	2	17	11161-79120	Case, distributor	1
7	09116-10116	Bolt (10 x 87)	10	18	11169-70D00	Gasket, case	1
8	11170-79203	Cover, cylinder head	2	19	04221-06129	Pin	2
9	11172-73000	Plate, breather	1	20	09103-08153	Bolt, No. 2 (8 x 30)	3
10	11173-73001	Gasket, breather plate	1				
11	02162-06103	Bolt	8				
12	11189-73004	Gasket, head cover	1				

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

## CYLINDER BLOCK, OIL PAN and GASKET (SUZUKI 970)

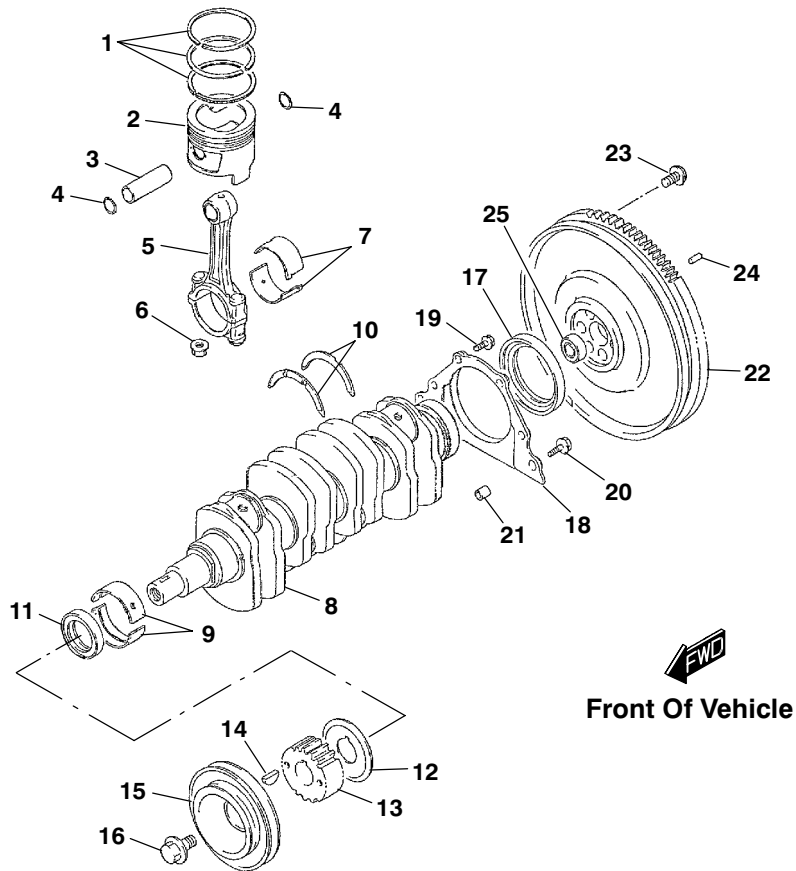


Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	11200-80001	Block, cylinder	1	16	11311-79100	Plate, clutch hsng. upper	1
2	09241-30009	•Plug (OD:30)	3	17	11320-77201	Plate, clutch hsng. lower	1
3	09246-20006	•Plug (OD:20)	2	18	16910-85550	Gauge, oil level	1
4	09246-05006	•Plug, oil gallery	1	19	37820-82001	Switch, oil pressure	1
5	09246-06002	•Plug, oil gallery	3	20	16510-82703	Filter, oil	1
6	01550-10603	•Bolt	10	21	11241-73003	Stand, oil filter	1
7	11219-85200	•Guide, oil level gauge	1	22	11510-85201	Pan, oil	1
8	09103-10063	Bolt (10 x 115)	2	23	09117-06059	Bolt (6 x 16)	16
9	01421-10403	Stud bolt	1	24	01411-06163	Stud bolt	2
10	01421-10503	Stud bolt	1	25	08316-10063	Nut	2
11	08316-10103	Nut	2	26	09247-12101	Plug, oil drain	1
12	04211-13149	Pin	2	27	09168-12018	Gasket	1
13	11221-73000	Plate, cylinder block	1	28	16520-79101	Strainer, oil pump	1
14	11229-73000	Gasket	1	29	09280-16005	O-ring	1
15	02162-06103	Bolt	6	30	01570-06163	Bolt	2

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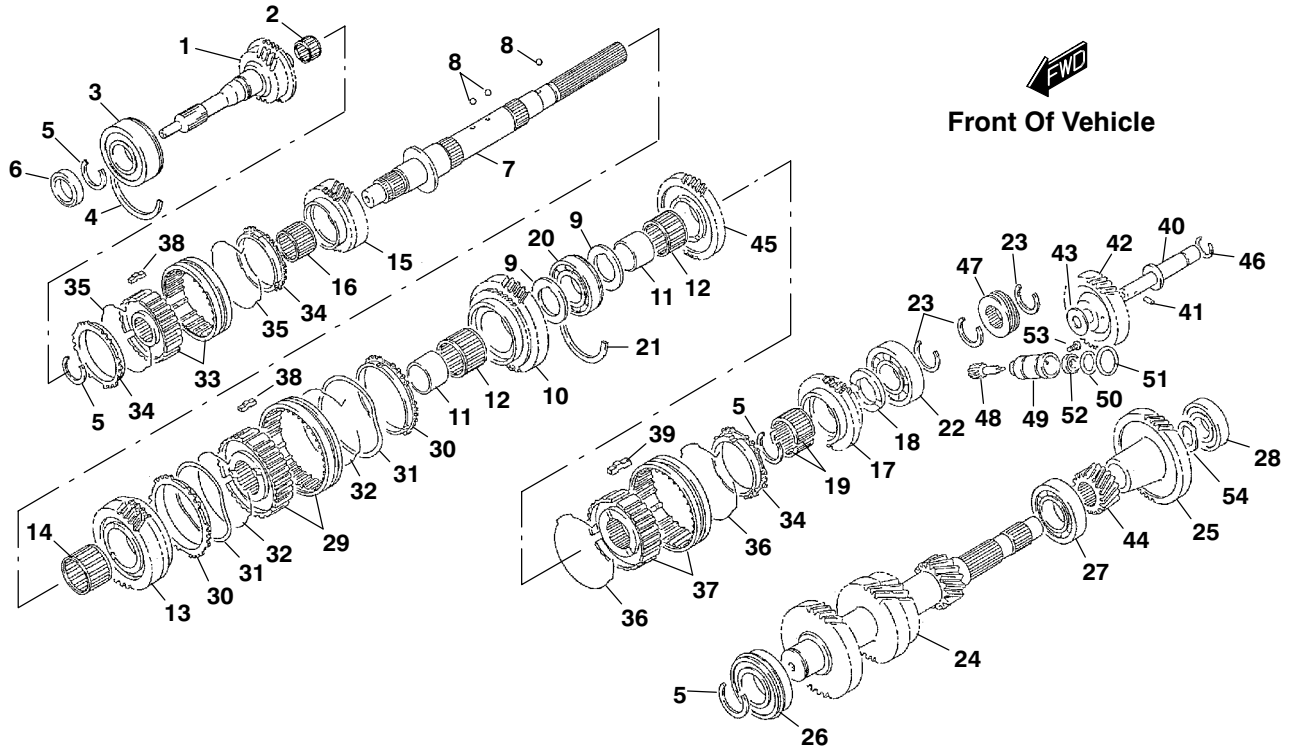
## CRANKSHAFT, FLYWHEEL and PISTONS (SUZUKI 970)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	12140-75112	Ring, piston (standard) ...	4	(9)	12300-73812-075	Bearing set, crnkshft. .	1
(1)	12140-75112-025	Ring, piston .....	4	(9)	12300-73812-100	Bearing set, crnkshft. .	1
(1)	12140-75112-050	Ring, piston .....	4	10	12300-73830	Bearing set, crank thrust ..	1
2	12111-85201-0B0	Piston (standard) ...	4	(10)	12300-73830-012	Bearing set, thrust ...	1
(2)	12111-85201-025	Piston (OS:0.25) ...	4	(10)	12300-73830-025	Bearing set, thrust ...	1
(2)	12111-85201-050	Piston (OS:0.50) ...	4	11	09283-32040	Seal, front .....	1
3	12151-29001	Pin, piston .....	4	12	12635-78401	Guide, timing belt .....	1
4	09381-16001	Circlip .....	8	13	12631-78401	Pulley, timing belt .....	1
5	12160-73010	Rod, connecting .....	4	14	08341-31059	Key .....	1
6	09159-08033	•Nut, connecting rod .....	8	15	12611-66C00	Pulley, crank .....	1
7	12181-81051-0A0	Bearing (standard) ...	8	16	12619-60B00	Bolt .....	1
(7)	12181-81051-025	Bearing, cnctng. rod ..	8	17	09283-60005	Seal, rear main .....	1
(7)	12181-81051-050	Bearing, cnctng. rod ..	8	18	11341-70B01	Housing, oil seal .....	1
(7)	12181-81051-075	Bearing, cnctng. rod ..	8	19	01550-06203	Bolt .....	4
(7)	12181-81051-100	Bearing, cnctng. rod ..	8	20	02122-06253	Bolt .....	2
8	12221-75104	Crankshaft .....	1	21	04211-09109	Pin .....	2
9	12300-73812-0A0	Bearing set, crnkshft. .	1	22	12620-85301	Flywheel .....	1
(9)	12300-73812-025	Bearing set, crnkshft. .	1	23	09103-10097	Bolt (10 x 17) .....	6
(9)	12300-73812-050	Bearing set, crnkshft. .	1	24	04421-06129	Pin .....	1
				25	12623-70B00	Bearing, input shaft .....	1

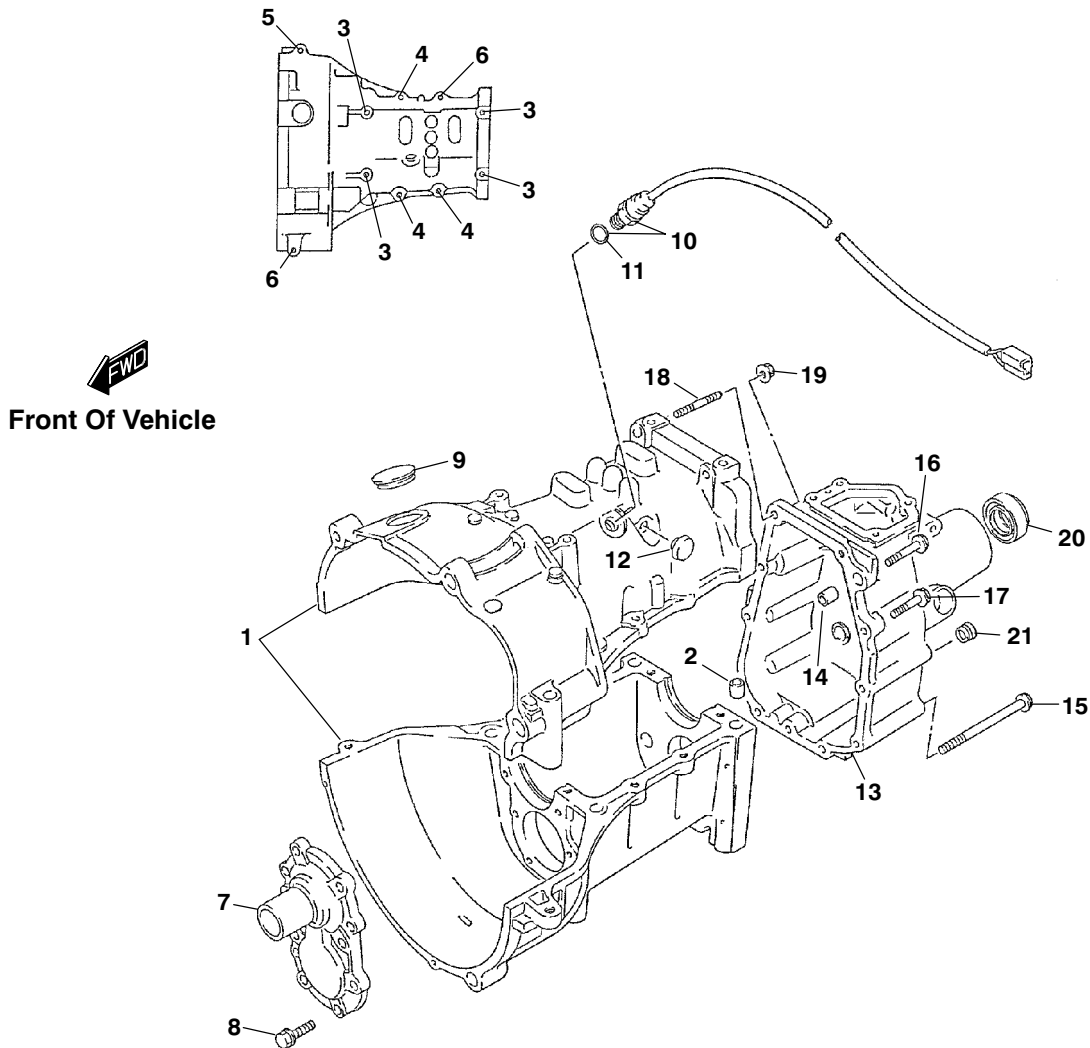
• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

## INPUT SHAFT and GEARS (MANUAL TRANSMISSION) (SUZUKI 970 and PERKINS DIESEL)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	24110-80410	Shaft, input	1	28	09262-20073	Bearing, rear	1
2	09263-20056	Bearing	1	29	24400-83000	Hub, synchronizer low	1
3	09262-28005	Bearing	1	30	24431-83001	Ring, synchronizer low	2
4	09390-68002	C-ring	1	31	24436-83000	Spring, low/2nd	2
5	09380-28007	Circlip	4	32	24441-85F41	Spring, low	2
6	09283-25088	Seal,oil	1	33	24410-83000	Hub, synchronizer high	1
7	24121-85252	Shaft, main	1	34	24432-83001	Ring, synchronizer high	3
8	06111-06003	Ball	3	35	24442-81A20	Spring, high	2
9	09166-30007	Washer	2	36	09388-00019	Spring, 5th speed	2
10	24211-83011	Gear, main shaft, low	1	37	24420-83000	Hub, reverse drive	1
11	09300-30003	Bushing	2	38	24471-60A00	Key	6
12	09263-35015	Bearing	2	39	24473-70D10	Key	3
13	24220-60A01	Gear, main shaft 2nd	1	40	24551-83010	Shaft, reverse idle gear	1
14	09263-35015	Bearing	1	41	09261-06003	Pin	1
15	24230-83001	Gear, main shaft 3rd	1	42	24560-83001	Gear, reverse idle (NT:33)	1
16	09263-30031	Bearing	1	43	09166-16014	Washer	1
17	24250-83020	Gear, main shaft 5th	1	44	24671-83000	Gear, countershaft (rev.)	1
18	24255-60A00	Washer	1	45	24681-83000	Gear, mainshaft (rev.)	1
19	24801-60810	Bearing	1	46	09380-17008	Circlip	1
20	09262-30086	Bearing	1	47	26121-85202	Gear, speedometer drive	1
21	09390-62010	C-ring	1	48	26131-85201	Gear, speedometer driven	1
22	09262-25073	Bearing	1	49	29431-85400	Case, speedometer gear	1
23	09380-25011	Circlip	3	50	09280-19001	O-ring	1
24	24131-83002	Shaft, counter	1	51	09280-21014	O-ring	1
25	24351-60A10	Gear, counter shaft 5th	1	52	09282-08001	Seal, oil	1
26	09262-28019	Bearing, front	1	53	09128-06032	Bolt	1
27	09262-28020	Bearing, center	1	54	09164-20008	Washer	1

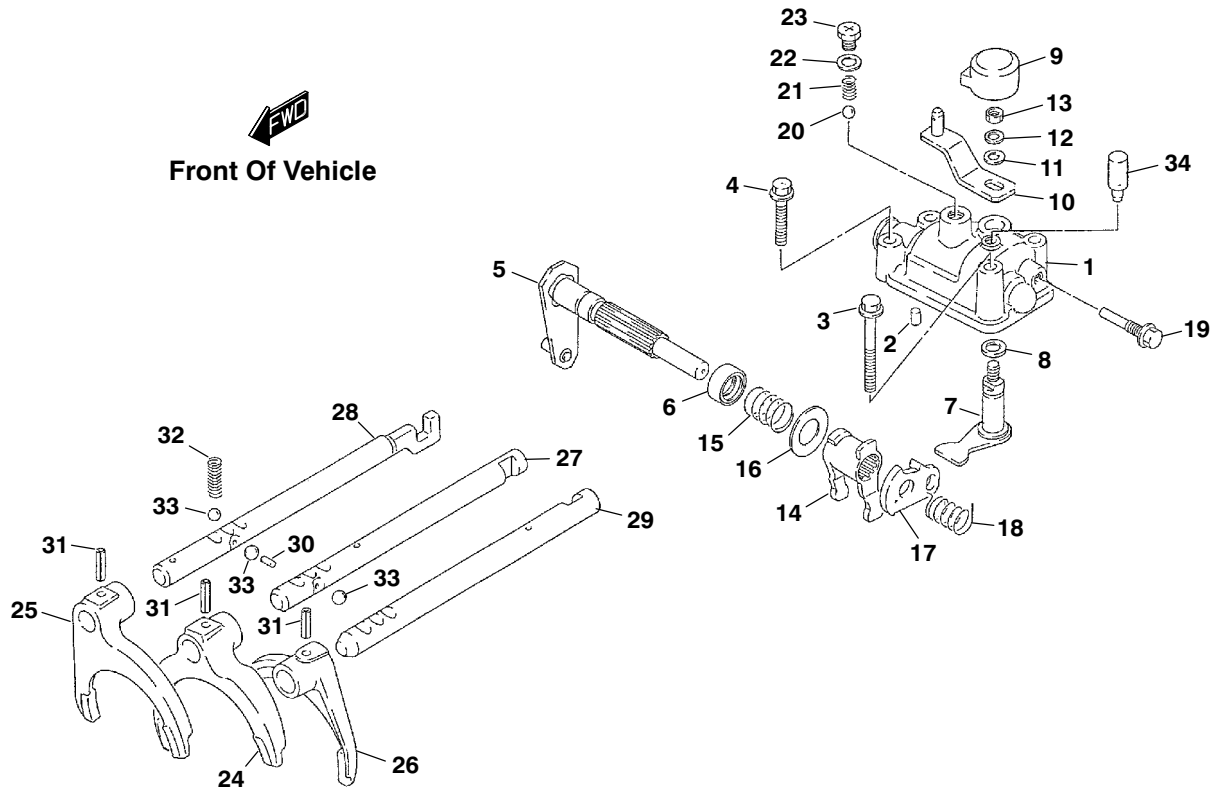
## TRANSMISSION CASE (SUZUKI 970 and PERKINS DIESEL)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	24700-85200	Case, transmission . . . . .	1	12	09250-10006	Plug, locating . . . . .	1
2	04211-13149	•Pin . . . . .	2	13	24770-85252	Case, extension . . . . .	1
3	09103-08131	•Bolt, No. 1 (8 x 120) . . . . .	4	14	04211-13149	Pin . . . . .	2
4	01550-08303	•Bolt, No. 2 . . . . .	3	15	09103-08132	Bolt, No. 1 (8 x 100) . . . . .	3
5	01550-08403	•Bolt, No. 3 . . . . .	1	16	01550-08403	Bolt, No. 2 . . . . .	1
6	01550-08803	•Bolt, No. 4 . . . . .	2	17	01550-08353	Bolt, No. 3 . . . . .	5
7	24741-83001	Retainer, input shaft brng. . . . .	1	18	01421-08303	Stud bolt . . . . .	1
8	09103-08152	Bolt (8 x 25) . . . . .	8	19	08316-10083	Nut . . . . .	1
9	09250-30003	Cap, inspection timing . . . . .	1	20	24780-83010	Seal, extension case . . . . .	1
10	37610-80023	Switch, back-up lamp . . . . .	1	21	09246-16010	Plug, oil filler . . . . .	2
11	09280-11002	•O-ring . . . . .	1				

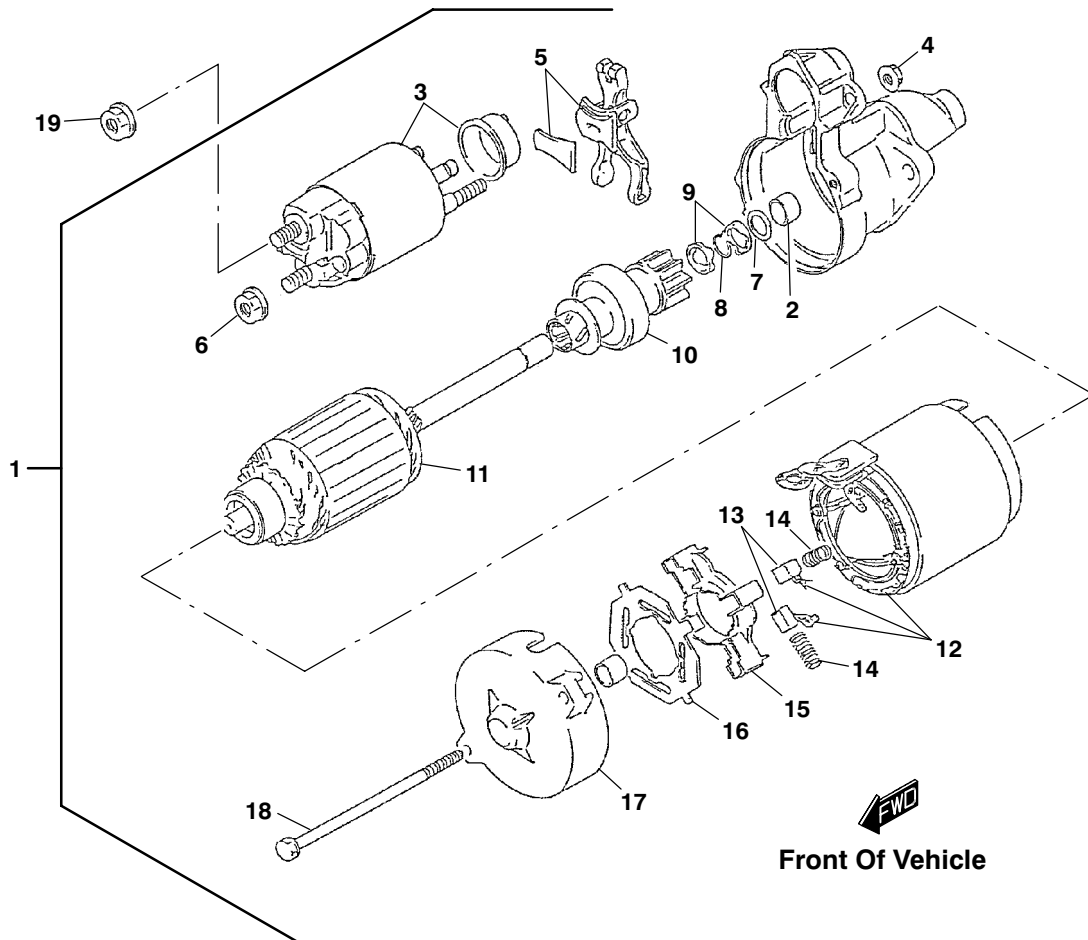
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## GEAR SHIFT FORK (SUZUKI 970 and PERKINS DIESEL)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	25121-85051	Case, gear shift lever . . . . .	1	18	25546-60C01	Spring . . . . .	1
2	04221-06129	Pin . . . . .	1	19	09135-08005	Bolt . . . . .	1
3	01550-08553	Bolt . . . . .	1	20	06111-10003	Ball . . . . .	1
4	01550-08403	Bolt . . . . .	3	21	25547-70D00	Spring . . . . .	1
5	25520-85203	Shaft, gear shift lever . . . . .	1	22	09168-10007	Gasket . . . . .	1
6	09284-17004	Seal, oil . . . . .	1	23	09128-10002	Bolt (10 x 9) . . . . .	1
7	25530-79501	Shaft, gear select . . . . .	1	24	25211-85201	Fork, low speed gear shift .	1
8	09286-09001	Seal, oil . . . . .	1	25	25221-85202	Fork, high speed gear shift	1
9	25536-84200	Boot, gear select shaft . . . . .	1	26	25221-83002	Fork, reverse gear shift . . .	1
10	25535-85412	Arm, gear select . . . . .	1	27	25411-85201	Shaft, low speed fork . . . . .	1
11	09162-08008	Washer . . . . .	1	28	25420-85201	Shaft, high speed fork . . . . .	1
12	08322-01083	Washer . . . . .	1	29	25451-85261	Shaft, reverse fork . . . . .	1
13	08310-00083	Nut . . . . .	1	30	09261-03017	Roller . . . . .	1
14	25541-85201	Lever, gear select . . . . .	1	31	09205-05012	Spring, pin . . . . .	3
15	25576-70D00	Spring . . . . .	1	32	25415-83000	Spring . . . . .	3
16	09160-17035	Washer (17 x 32 x 1.2) . . . . .	1	33	06111-12004	Ball . . . . .	5
17	25545-85055	Dog, reverse shift limit . . . . .	1	34	24821-09001	Plug, breather . . . . .	1

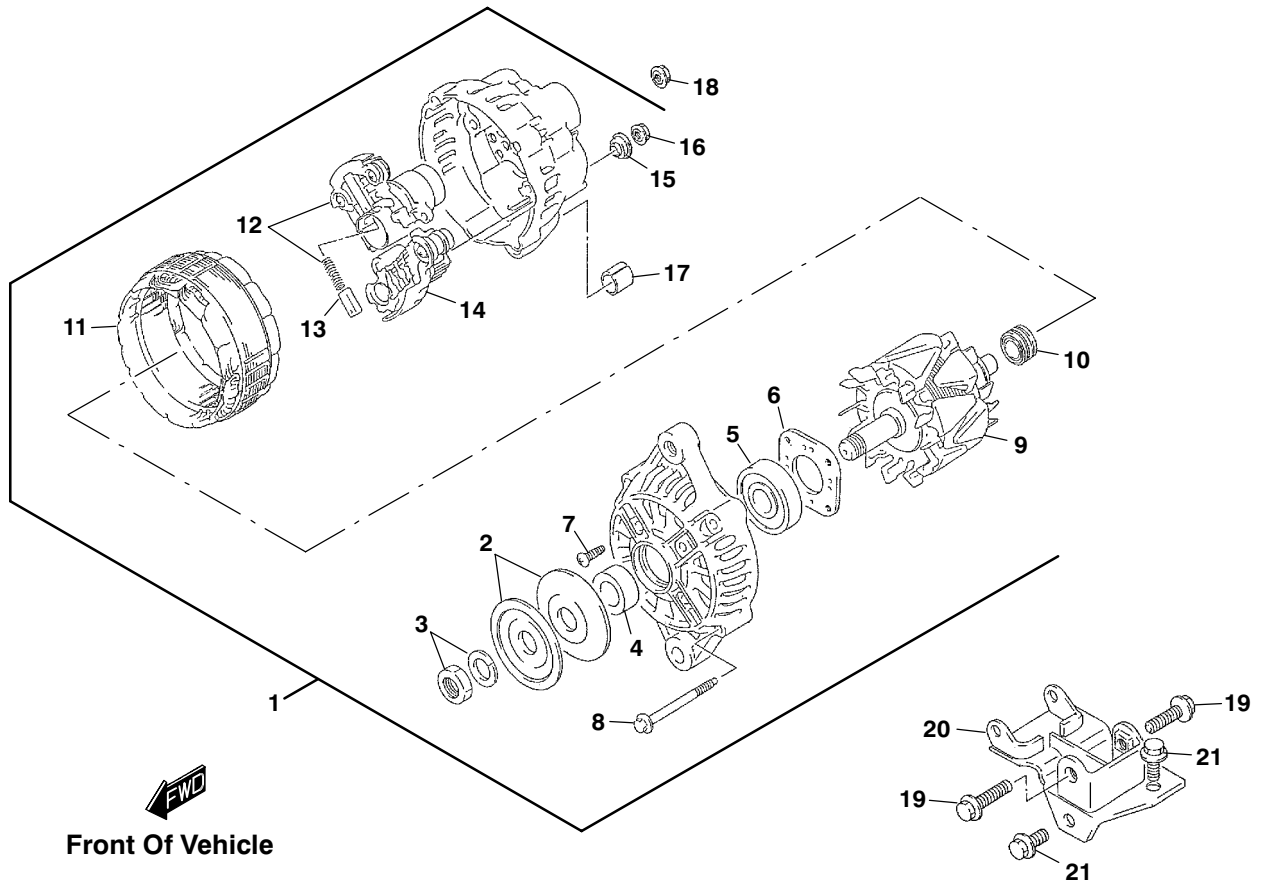
## STARTER MOTOR (SUZUKI 970)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	31100-79X50	Motor, starting	1	11	31311-51A10	•Armature	1
2	31152-51A10	•Bushing	1	12	31110-52A50	•Yoke assembly	1
3	31220-51A10	•Switch assembly	1	13	31131-51A10	••Brush	4
4	08316-10063	•Nut	2	14	31135-51A10	•Spring, brush	4
5	31191-85020	•Lever, pinion drive	1	15	31173-51A10	•Holder, brush	1
6	08316-10083	•Nut, switch	2	16	31175-51A10	•Insulator	1
7	31153-51A10	•Washer	1	17	31172-51A10	•Bushing	1
8	31312-51A10	•Ring, snap	1	18	31281-51A10	•Bolt	2
9	31310-51A10	•Nut, pinion stop	2	19	08316-10083	Nut	1
10	31320-51A10	•Clutch assembly	1				

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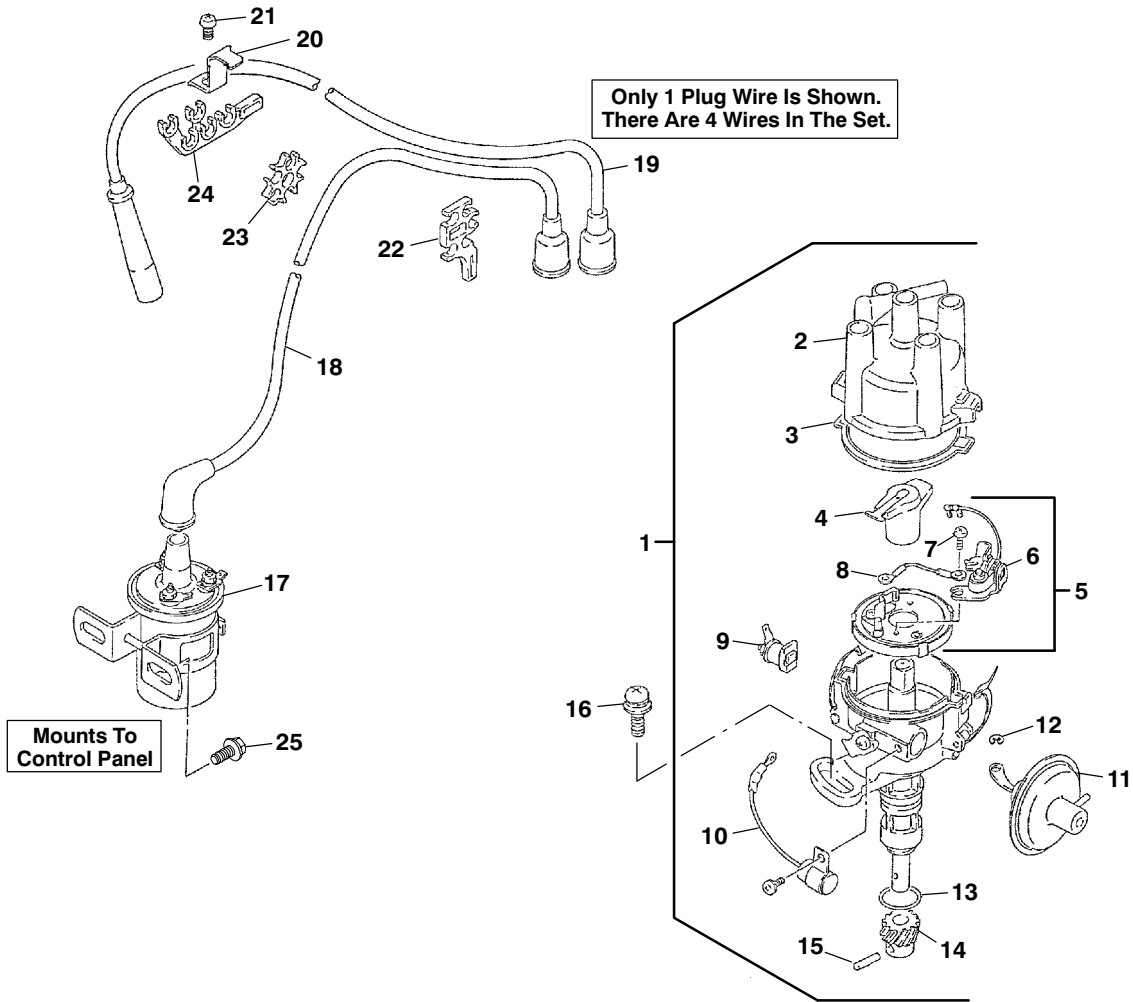
## ALTERNATOR (SUZUKI 970)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	31400-60C11	Generator (alternator)	1	12	32500-60C11	•Regulator	1
2	31771-82C20	•Pulley	2	13	31631-60F30	••Brush set	2
3	31775-50F20	•Nut	1	14	31621-70D11	•Rectifier	1
4	31792-51F10	•Spacer	1	15	31514-82630	•Insulator	1
5	31582-50F20	•Bearing	1	16	08316-10063	•Nut	1
6	31585-60A10	•Retainer, bearing	1	17	31616-82C20	•Bushing	1
7	31586-60A10	•Screw	1	18	08316-10063	Nut	1
8	31651-86520	•Screw kit	1	19	01550-08303	Bolt	2
9	31710-82C20	•Rotor	1	20	95110-66C00	Bracket	1
10	31612-60A10	••Bearing, rear	1	21	01550-08163	Bolt	3
11	31410-85320	•Stator	1				

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

## DISTRIBUTOR (SUZUKI 970)



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	33100-85750	Distributor	1	15	33268-72010	•Pin	1
2	33321-60A10	•Cap, distributor	1	16	09138-08003	Screw (8 x 30)	1
3	33324-79610	•Seal, cap	1	17	33410-85010	Coil, ignition	1
4	33310-82010	•Rotor	1	18	33710-85051	Cord, high tension No. 1 (coil wire)	1
5	33102-75110	•Breaker assembly	1	19	33705-85220	Cord set, high tension (spark plug wire set)	1
6	33140-74010	••Point assembly	1	20	33881-75100	Bracket, cord clamp	1
7	33151-52011	••Screw, point	2	21	02112-06083	Screw	1
8	33341-76410	••Wire, read	1	22	33881-85210	Clamp, distributor side	1
9	33210-73010	•Terminal assembly	1	23	33882-85210	Spacer, cord	1
10	33261-77090	•Condenser	1	24	33883-85210	Clamp, head	1
11	33230-85730	•Controller, vacuum	1	25	800934	Screw, M6-1.00 x 16 (10.9)	2
12	33239-76410	•E-ring	1				
13	33278-85310	•O-ring	1				
14	33267-79610	•Gear	1				

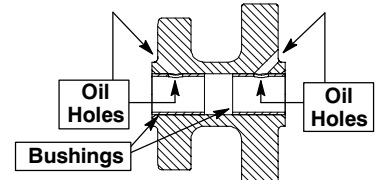
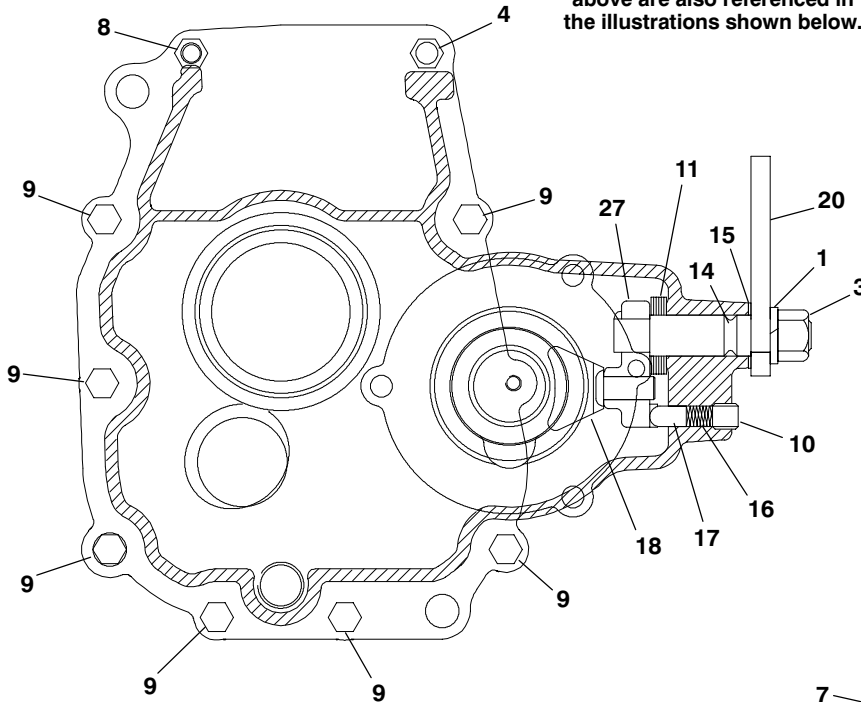
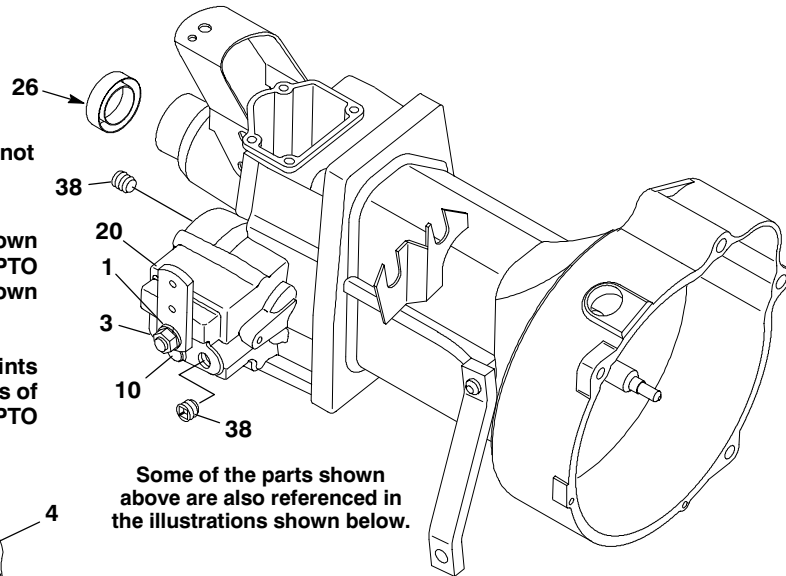
• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

# MECHANICAL PTO (SUZUKI 970 and PERKINS DIESEL)

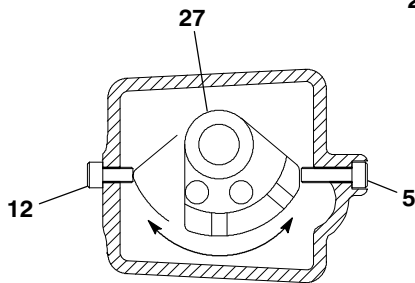
The parts breakdown illustration was not available at the time of this printing.

The isometric view of the transmission shown at the right references the location of the PTO housing. Please use the illustrations shown below for individual PTO parts.

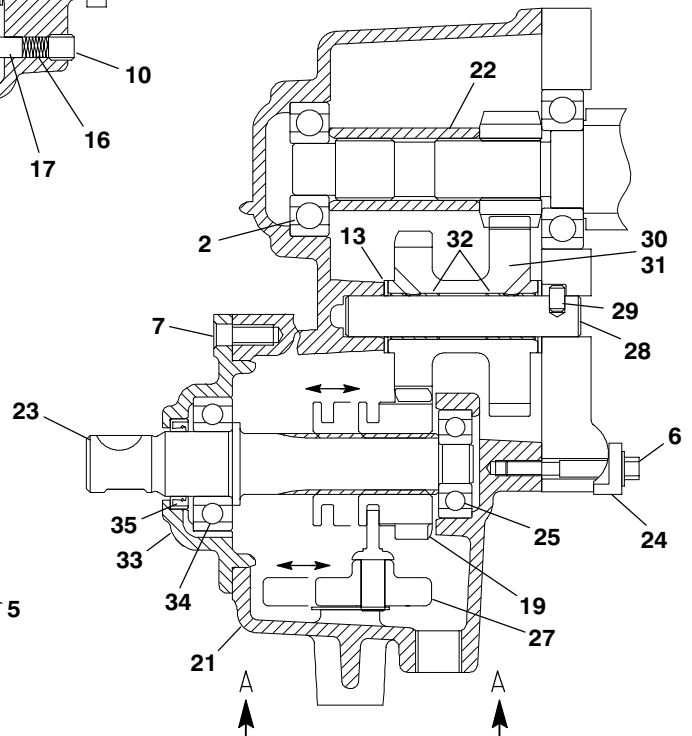
Transmission fluid capacity is 2.6 pints (80W-90 gear oil). Fill to bottom of threads of oil fill plug hole, located on right side of PTO housing.



In reference to items 30, 31 & 32, make sure oil holes in gear align with oil holes in the bushings.

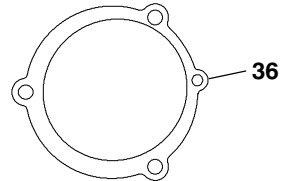
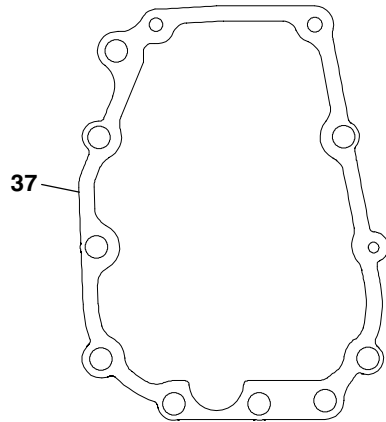


VIEW A-A





**MECHANICAL PTO  
(SUZUKI 970 and PERKINS DIESEL)**



Ref. No.	Part No.	Description	No. Req'd	Ref. No.	Part No.	Description	No. Req'd
1	120166	Lockwasher, 1/2	1	20	817397	Arm, PTO shifter	1
2	181027	Bearing, ball (mm 20 52 15 "OP")	1	21	844181	Housing, PTO	1
3	301988	Nut, 1/2-20	1	22	844184	Spacer, 5th gear	1
4	450324	Nut, M8-1.25 (G8.8)	1	23	844185	Shaft, output	1
5	452380	Bolt, M6-1.00 x 30 (8.8)	1	24	844186	Washer, special	1
6	452381	Screw, M6-1.00 x 40 (8.8)	1	25	844187	Bearing, ball (.59 1.65 .51 "OP")	1
7	452389	Screw, M8-1.25 x 25 (8.8)	3	26	844906	Seal, tailshaft	1
8	452390	Bolt, M8-1.25 x 30 (8.8)	1	27	879807	Arm assembly, PTO shifter	1
9	452396	Bolt, M8-1.25 x 90 (8.8)	7	28	894947	Shaft, idler	1
10	548204	Set screw, 3/8-16 x 3/8	1	29	316942	•Pin, spirol	1
11	548477	Washer	6	30	894965	Gear assembly, idler	1
12	800425	Screw, M6-1.00 x 12 (8.8)	1	31	844182	•Gear, idler	1
13	805307	Washer, 5/8	1	32	09304-16014	•Bushing, countershaft	2
14	807624	O-ring	1	33	894989	Housing, bearing	1
15	812419	Shim, transmission	1	34	815093	•Bearing, ball (.998 2.05 .59 "OP")	1
16	815012	Spring	1	35	844188	•Seal, oil	1
17	815013	Button	1	36	2700120	Gasket, PTO housing to trans	1
18	815085	Fork, shifter	1	37	2700121	Gasket, PTO housing	1
19	815182	Gear, PTO sliding	1	38	09246-16010	Plug, oil fill	2

• INDENTED PART NAMES INDICATE THESE PARTS ARE INCLUDED IN THE PRECEDING ASSEMBLY

## TORQUE SPECIFICATIONS HEX HEAD CAP SCREWS

The torque values shown should be used as a general guideline when specific torque values are not given.  
Note the minimum grade for the U.S. standard bolt is **grade 5**.

### U.S. Standard Hardware


Grade	Shank Size (Diameter in inches, fine or coarse thread)														
		1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4	7/8	1	1 1/8			
SAE grade 5*	ft.-lbs.	9	18	31	50	75	110	150	250	378	583	782			
	N·m	12	24	42	68	102	150	203	339	513	790	1060			
SAE grade 8**	ft.-lbs.	13	28	46	75	115	165	225	370	591	893	1410			
	N·m	18	38	62	108	156	224	305	502	801	1211	1912			
Flangelock Screw w/ Flangelock Nut	ft.-lbs.		24	40											
	N·m		33	54											


\* Grade 5 marking -  **Minimum commercial quality** (Lower quality not recommended).


\*\* Grade 8 marking - 

### Metric Standard Hardware

Grade	Shank Size (Diameter in millimeters, fine or coarse thread)														
		M4	M5	M6	M7	M8	M10	M12	M14	M16	M18	M20	M22	M24	M27
Grade 8.8*	ft.-lbs.	1.5	3	5.2	8.2	13.5	24	43.5	70.5	108	142	195	276	353	530
	N·m	2	4	7	11	18	32	58	94	144	190	260	368	470	707
Grade 10.9**	ft.-lbs.	2.2	4.5	7.5	12	18.8	35.2	62.2	100	147	202	275	390	498	747
	N·m	3	6	10	16	25	47	83	133	196	269	366	520	664	996
Grade 12.9***	ft.-lbs.	2.7	5.2	8.2	15	21.8	43.5	75	119	176	242	330	471	596	904
	N·m	3.6	7	11	20	29	58	100	159	235	323	440	628	794	1205

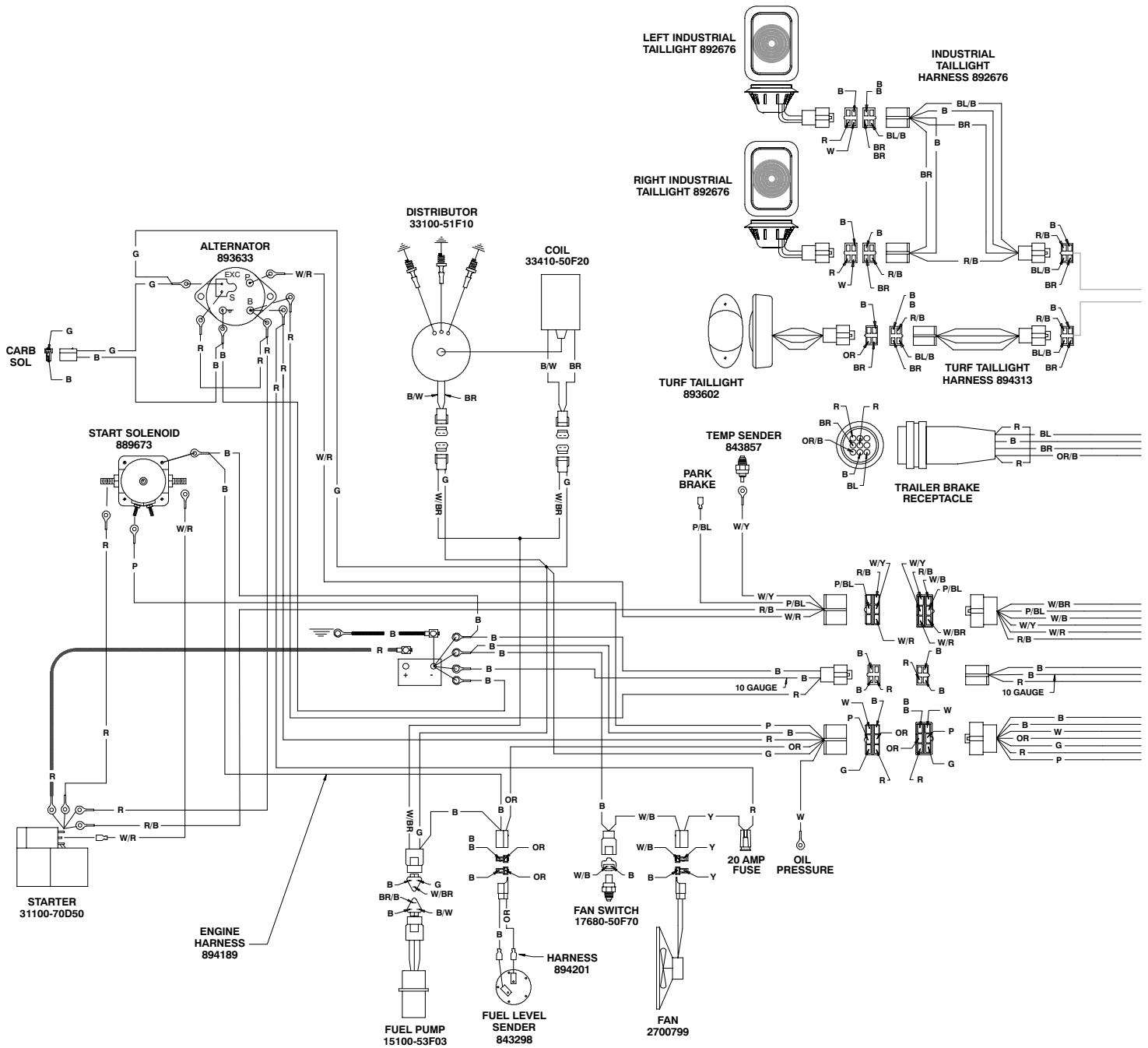
\* Grade 8.8 marking - 

\*\* Grade 10.9 marking - 

\*\*\* Grade 12.9 marking - 



# WIRING DIAGRAM SUZUKI K6A TURF TRUCKSTER



**COLOR CODE:**

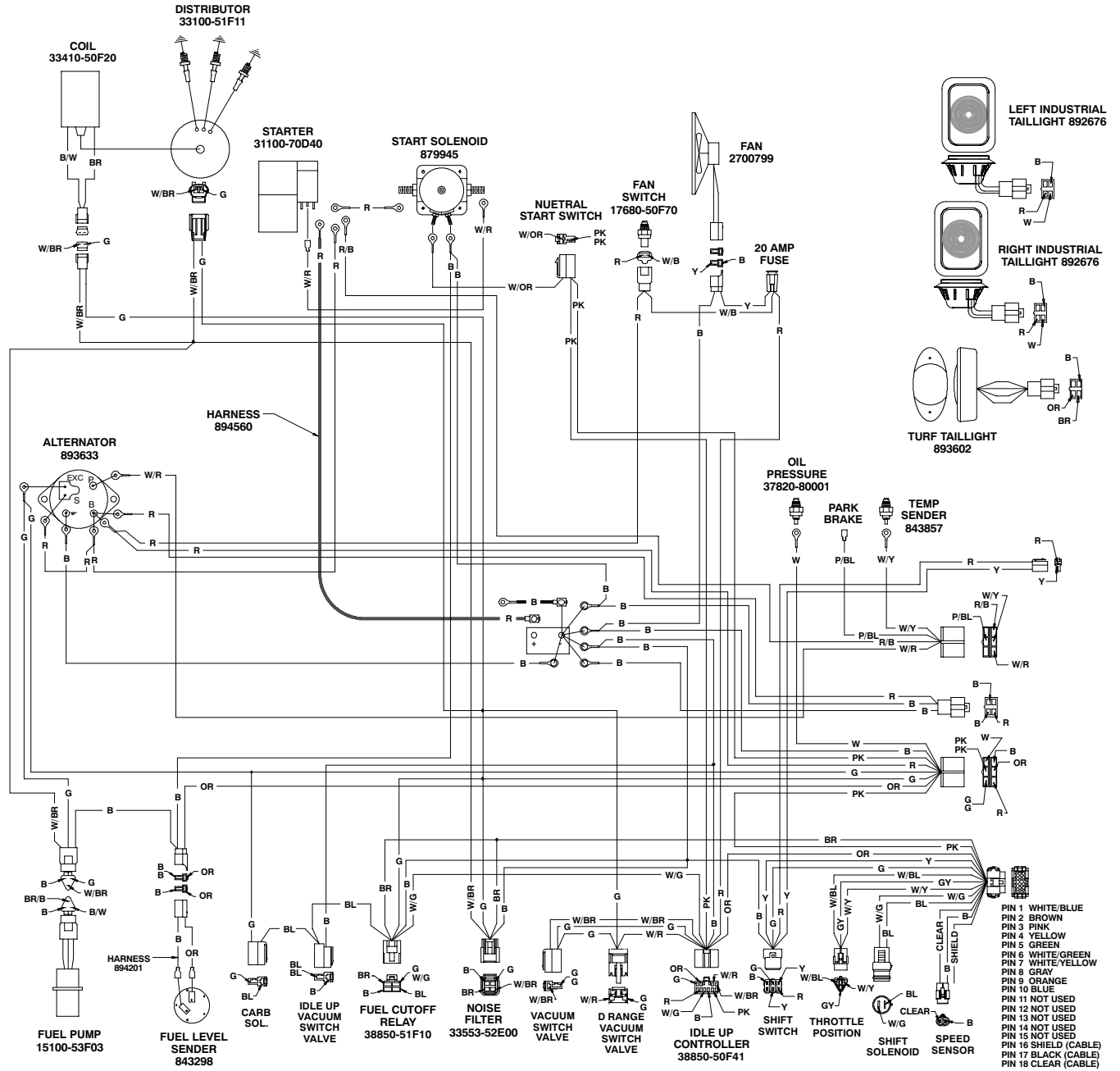
- |             |                              |                              |
|-------------|------------------------------|------------------------------|
| B - BLACK   | W - WHITE                    | W/BR - WHITE w/BROWN STRIPE  |
| BL - BLUE   | Y - YELLOW                   | W/G - WHITE w/GREEN STRIPE   |
| BR - BROWN  | BL/B - BLUE w/BLACK STRIPE   | W/OR - WHITE w/ORANGE STRIPE |
| G - GREEN   | G/B - GREEN w/BLACK STRIPE   | W/R - WHITE w/RED STRIPE     |
| GY - GREY   | OR/B - ORANGE w/BLACK STRIPE | W/Y - WHITE w/YELLOW STRIPE  |
| OR - ORANGE | P/BL - PURPLE w/BLUE STRIPE  | Y/B - YELLOW w/BLACK STRIPE  |
| PK - PINK   | R/B - RED w/BLACK STRIPE     | Y/R - YELLOW w/RED STRIPE    |
| P - PURPLE  | W/B - WHITE w/BLACK STRIPE   |                              |
| R - RED     | W/BL - WHITE w/BLUE STRIPE   |                              |





# WIRING DIAGRAM

## SUZUKI K6A TURF TRUCKSTER with AUTOMATIC TRANSMISSION (con't.)



**COLOR CODE:**

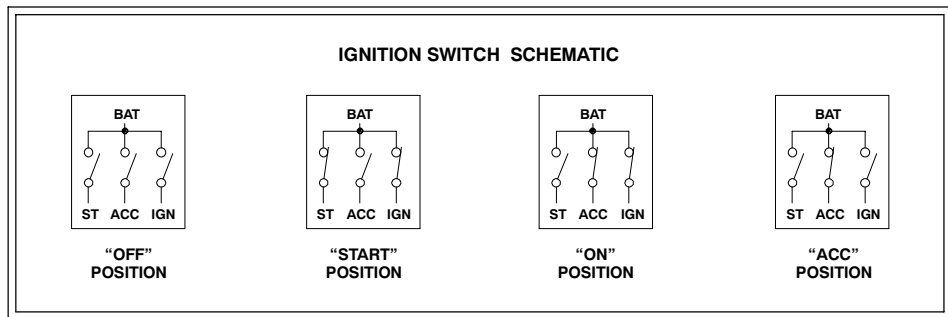
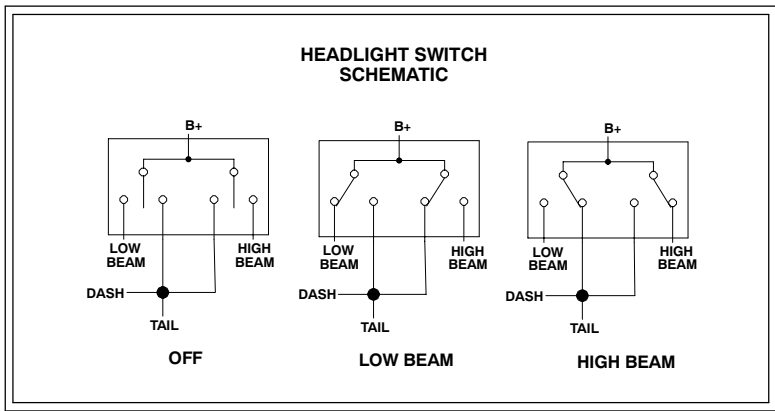
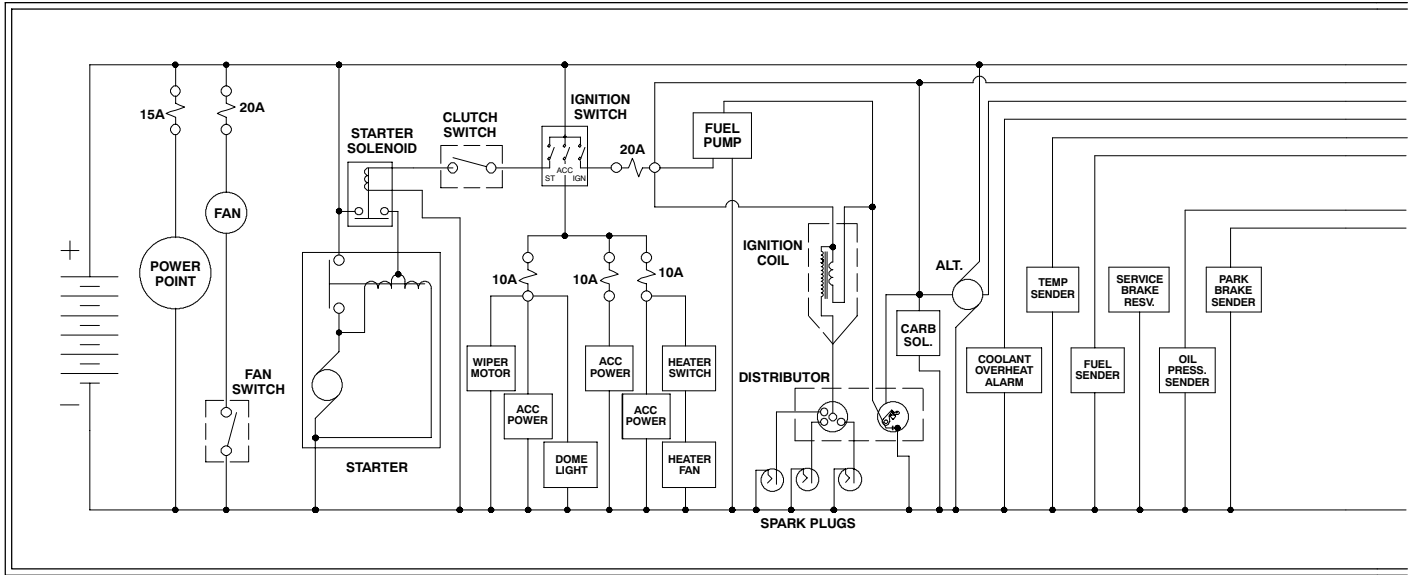
- |             |                              |                              |
|-------------|------------------------------|------------------------------|
| B - BLACK   | W - WHITE                    | W/BR - WHITE w/BROWN STRIPE  |
| BL - BLUE   | Y - YELLOW                   | W/G - WHITE w/GREEN STRIPE   |
| BR - BROWN  | BL/B - BLUE w/BLACK STRIPE   | W/OR - WHITE w/ORANGE STRIPE |
| G - GREEN   | G/B - GREEN w/BLACK STRIPE   | W/R - WHITE w/RED STRIPE     |
| GY - GREY   | OR/B - ORANGE w/BLACK STRIPE | W/Y - WHITE w/YELLOW STRIPE  |
| OR - ORANGE | P/BL - PURPLE w/BLUE STRIPE  | Y/B - YELLOW w/BLACK STRIPE  |
| PK - PINK   | R/B - RED w/BLACK STRIPE     | Y/R - YELLOW w/RED STRIPE    |
| P - PURPLE  | W/B - WHITE w/BLACK STRIPE   |                              |
| R - RED     | W/BL - WHITE w/BLUE STRIPE   |                              |

- PIN 1 WHITE/BLUE
- PIN 2 BROWN
- PIN 3 PINK
- PIN 4 YELLOW
- PIN 5 GREEN
- PIN 6 WHITE/GREEN
- PIN 7 WHITE/YELLOW
- PIN 8 GRAY
- PIN 9 ORANGE
- PIN 10 BLUE
- PIN 11 NOT USED
- PIN 12 NOT USED
- PIN 13 NOT USED
- PIN 14 NOT USED
- PIN 15 NOT USED
- PIN 16 SHIELD (CABLE)
- PIN 17 BLACK (CABLE)
- PIN 18 CLEAR (CABLE)





# WIRING SCHEMATIC SUZUKI K6A TURF TRUCKSTER

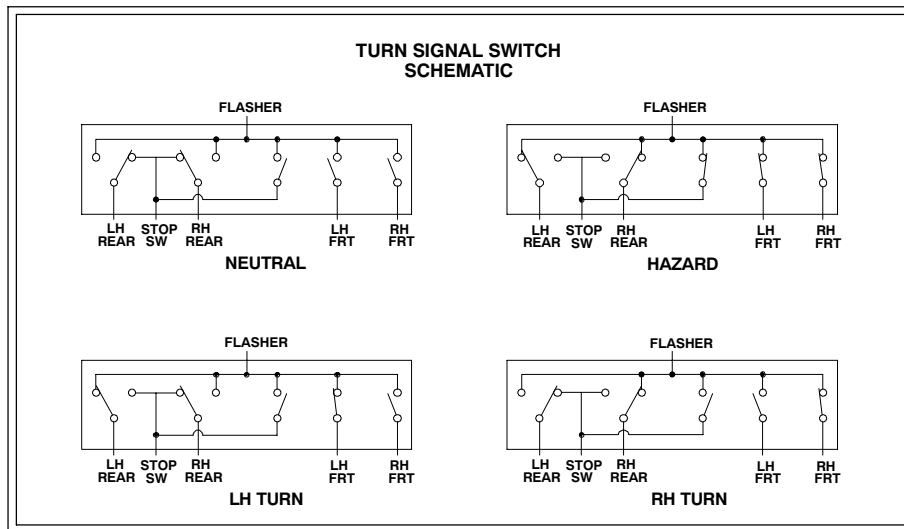
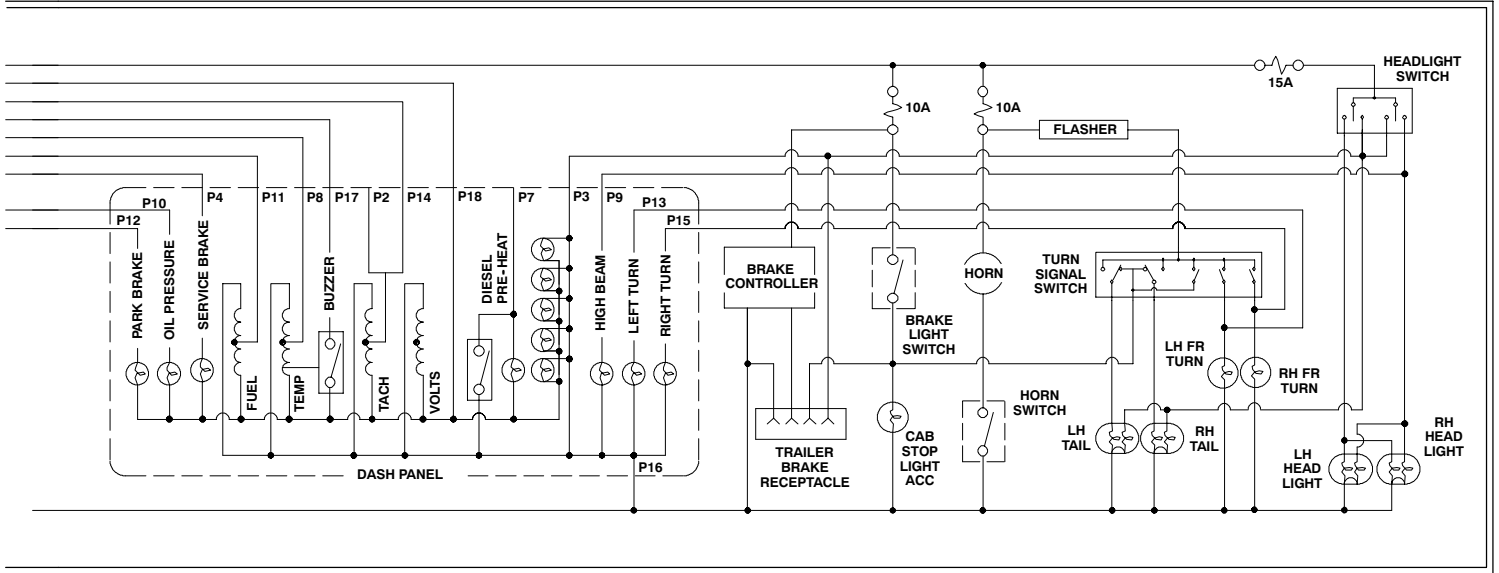


W.S.  
No. 1

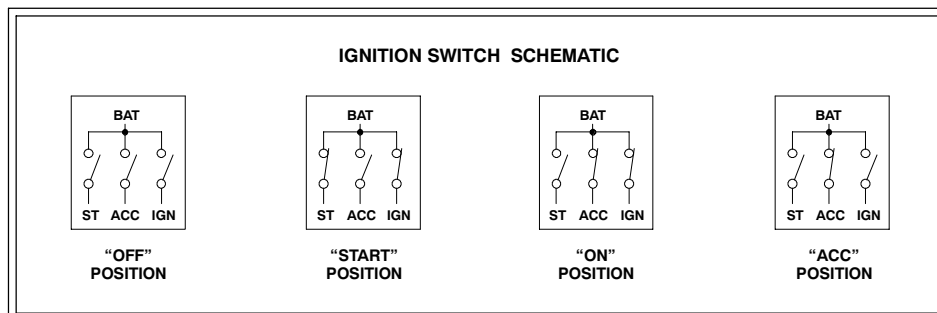
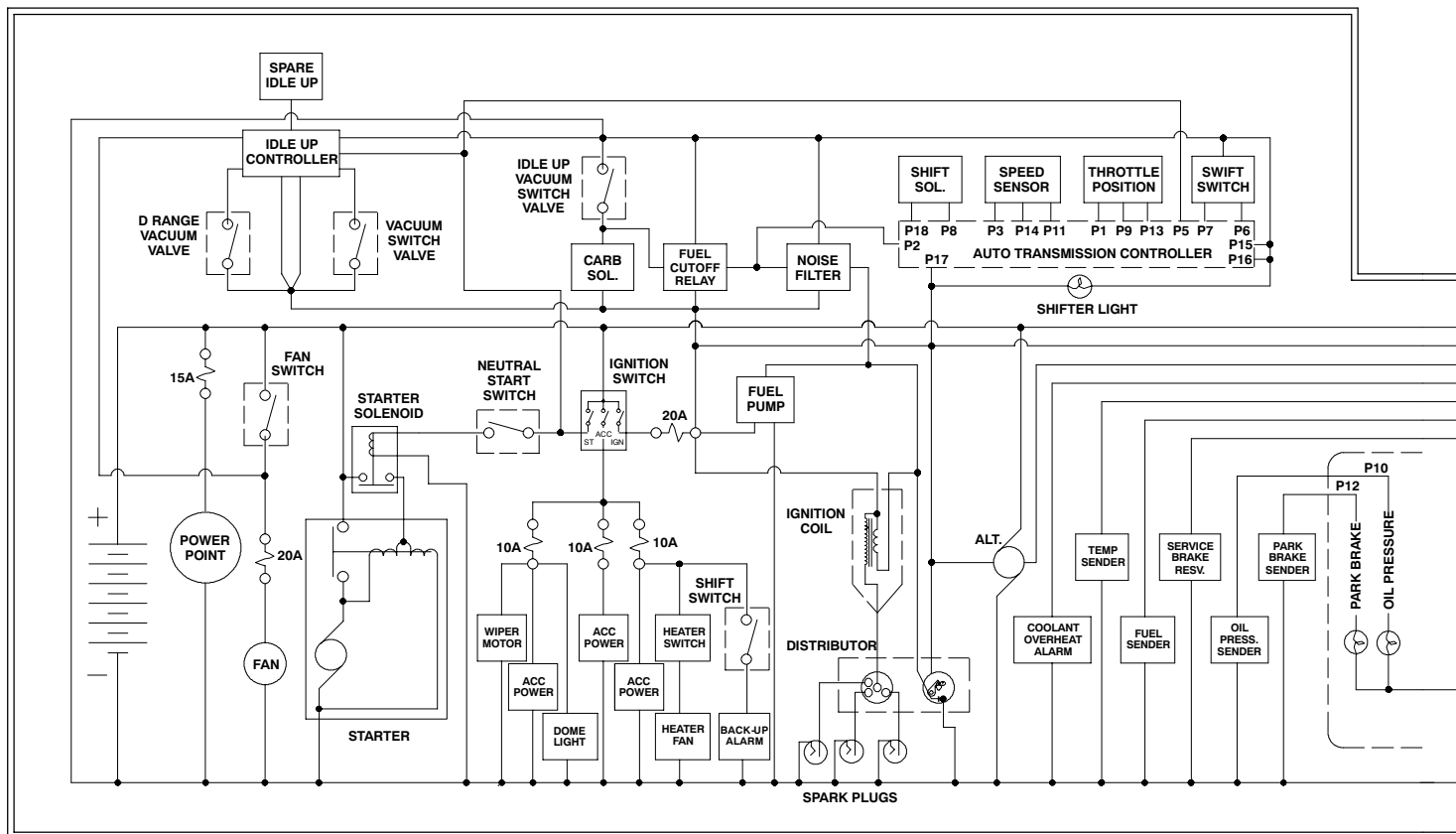


# WIRING SCHEMATIC

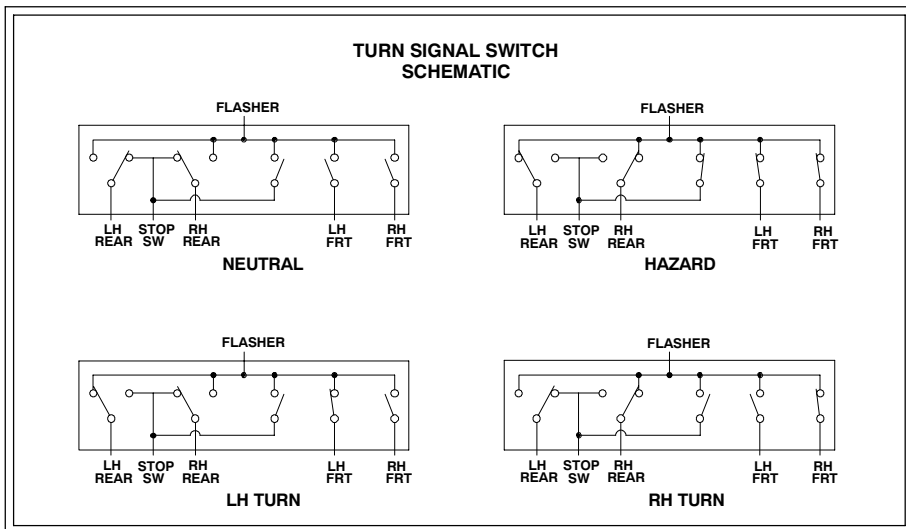
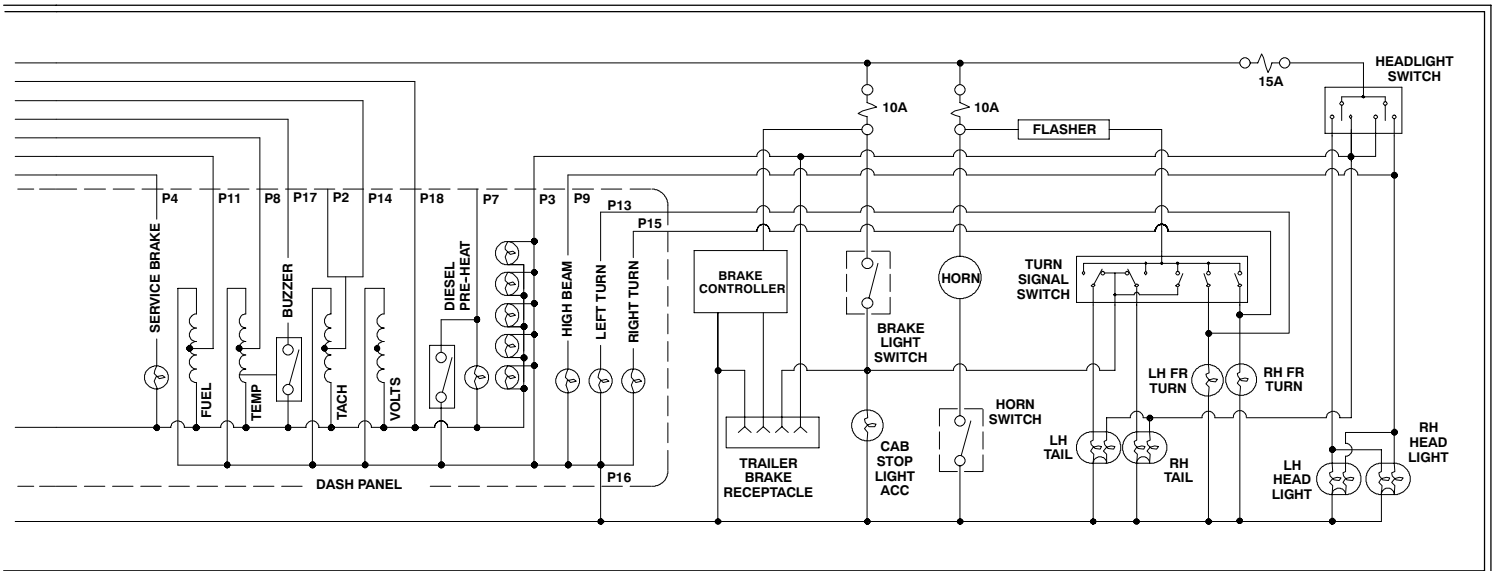
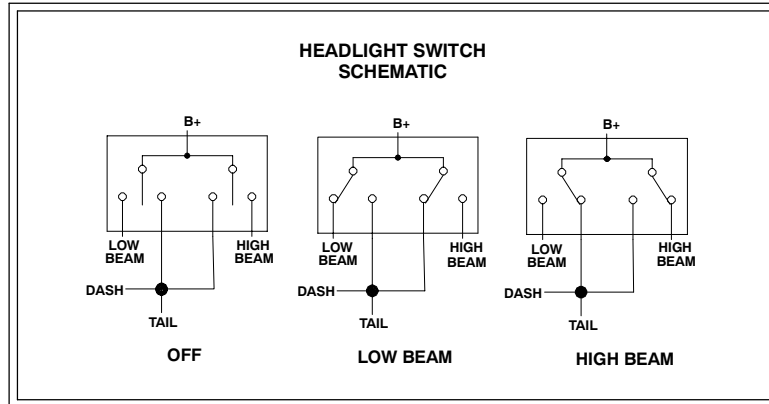
## SUZUKI K6A TURF TRUCKSTER (con't.)



# WIRING SCHEMATIC SUZUKI K6A TURF TRUCKSTER WITH AUTOMATIC TRANSMISSION

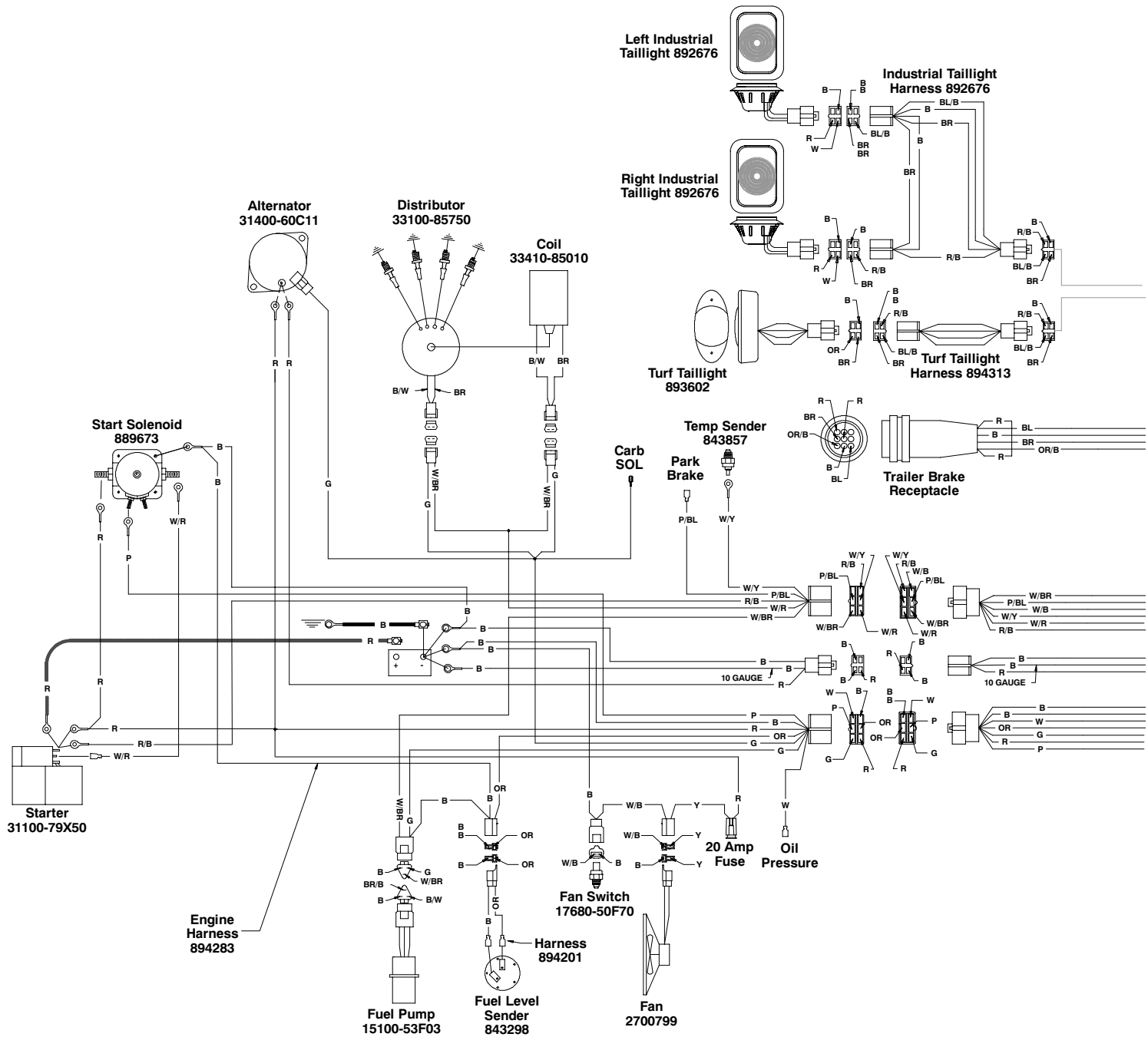


# WIRING SCHEMATIC SUZUKI K6A TURF TRUCKSTER WITH AUTOMATIC TRANSMISSION (con't.)



W.S.  
No.2

# WIRING DIAGRAM SUZUKI 970 TURF TRUCKSTER



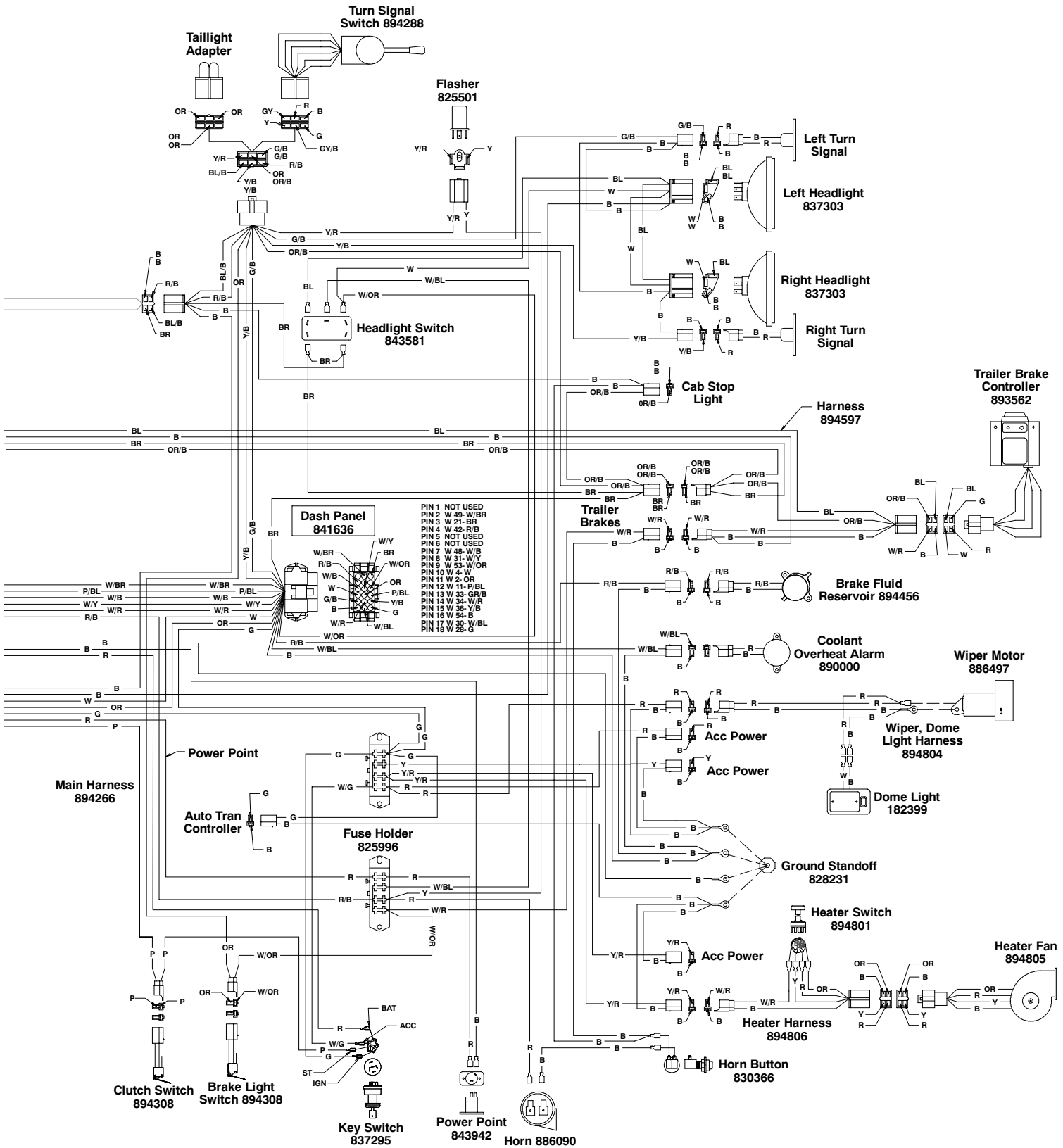
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BL - BLUE	Y - YELLOW	W/G - WHITE w/GREEN STRIPE
BR - BROWN	BL/B - BLUE w/BLACK STRIPE	W/OR - WHITE w/ORANGE STRIPE
G - GREEN	G/B - GREEN w/BLACK STRIPE	W/R - WHITE w/RED STRIPE
GY - GREY	OR/B - ORANGE w/BLACK STRIPE	W/Y - WHITE w/YELLOW STRIPE
OR - ORANGE	P/BL - PURPLE w/BLUE STRIPE	Y/B - YELLOW w/BLACK STRIPE
PK - PINK	R/B - RED w/BLACK STRIPE	Y/R - YELLOW w/RED STRIPE
P - PURPLE	W/B - WHITE w/BLACK STRIPE	
R - RED	W/BL - WHITE w/BLUE STRIPE	

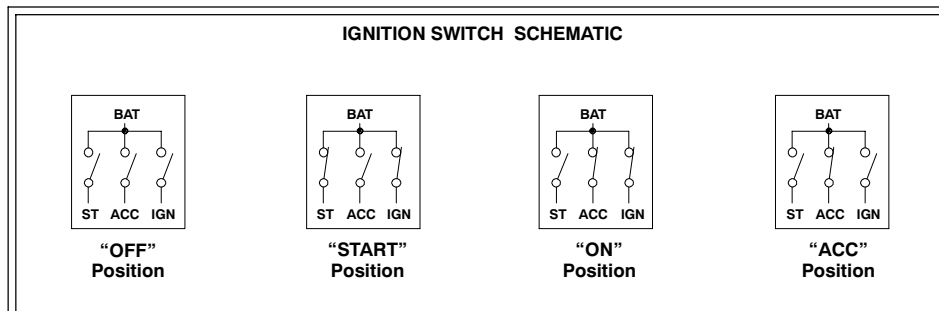
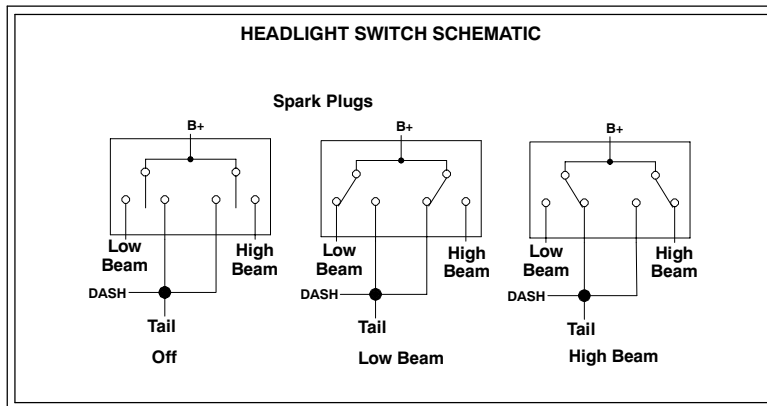
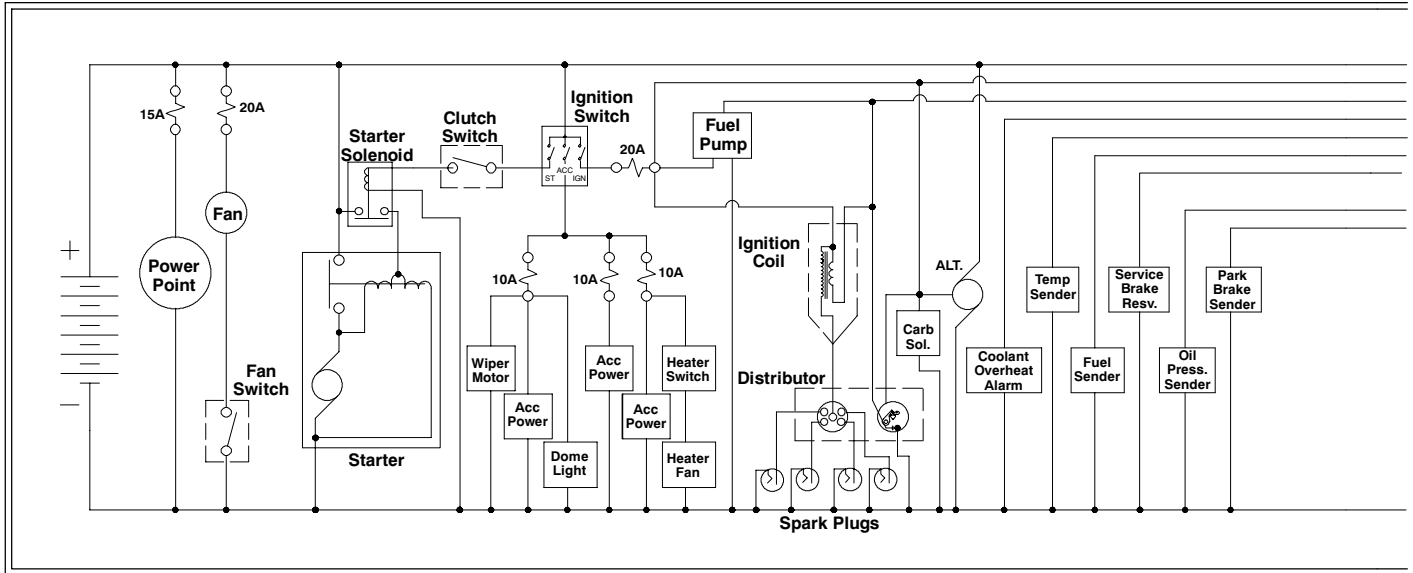


# WIRING DIAGRAM

## SUZUKI 970 TURF TRUCKSTER (con't.)

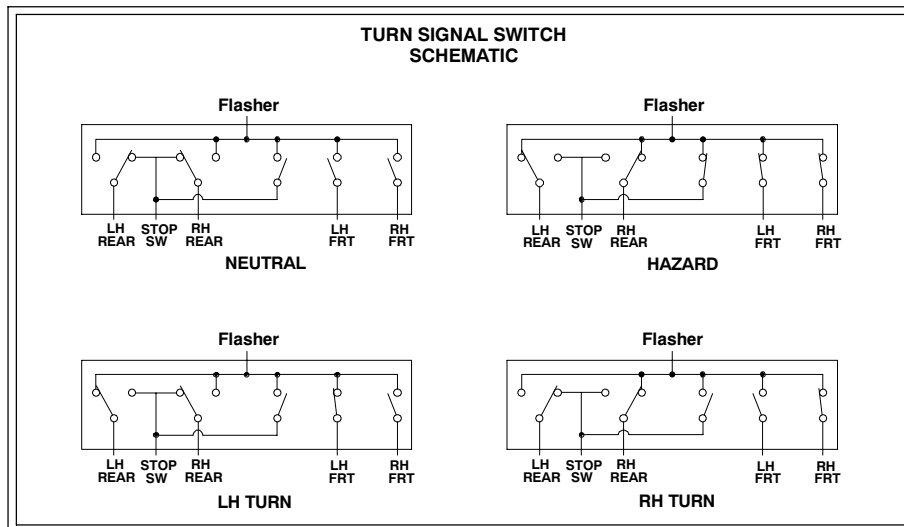
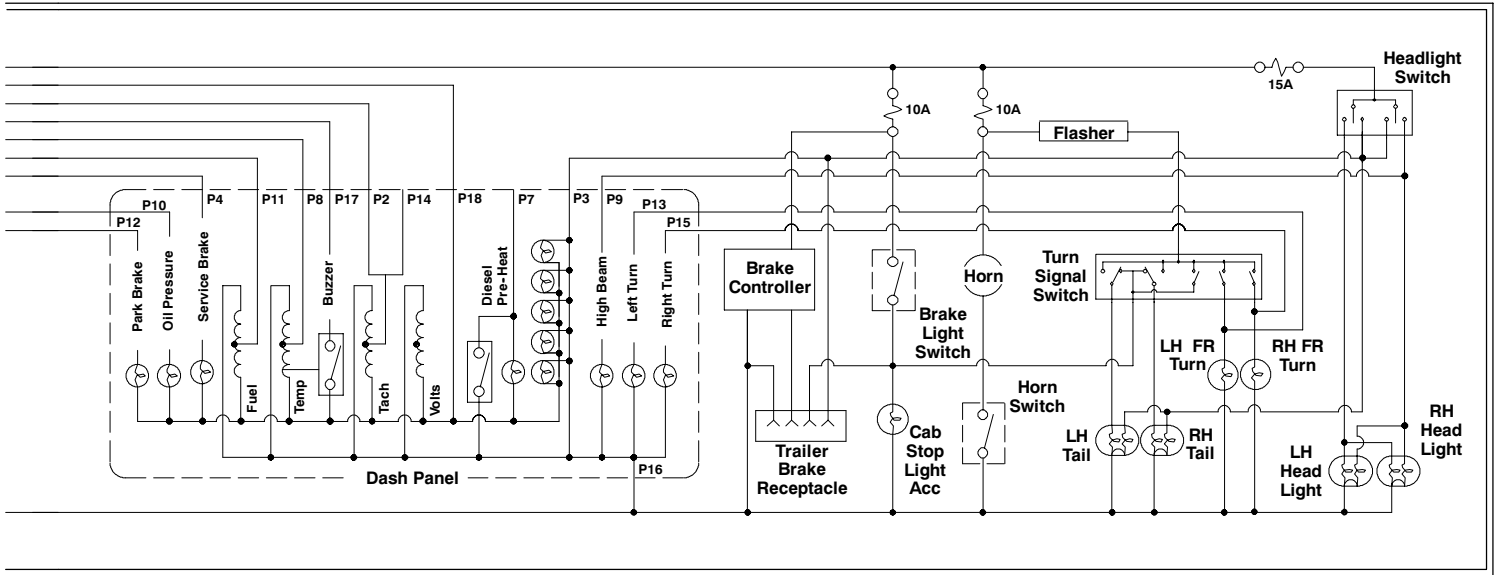


# WIRING SCHEMATIC SUZUKI 970 TURF TRUCKSTER

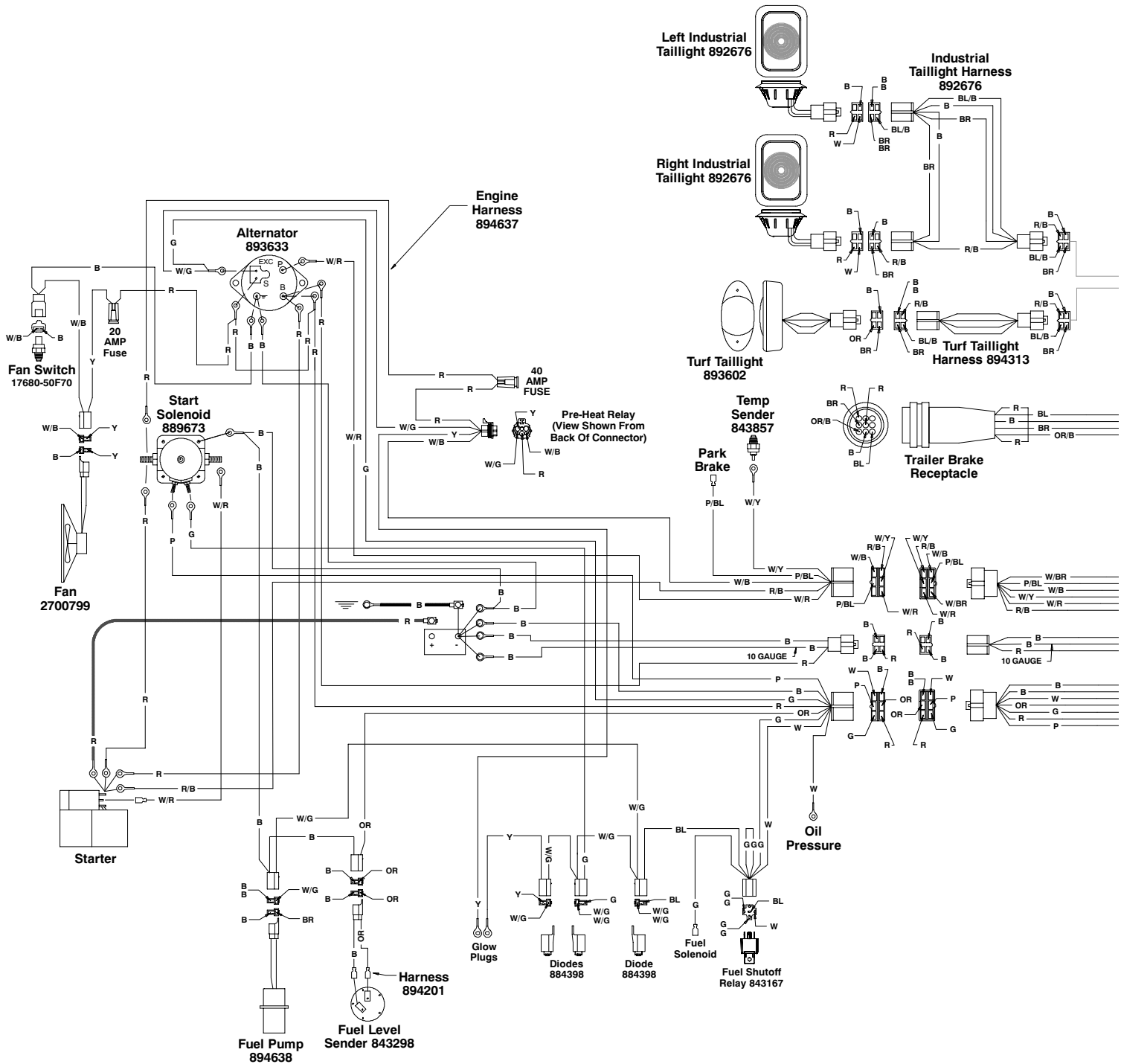


# WIRING SCHEMATIC

## SUZUKI 970 TURF TRUCKSTER (con't.)



# WIRING DIAGRAM DIESEL TURF TRUCKSTER



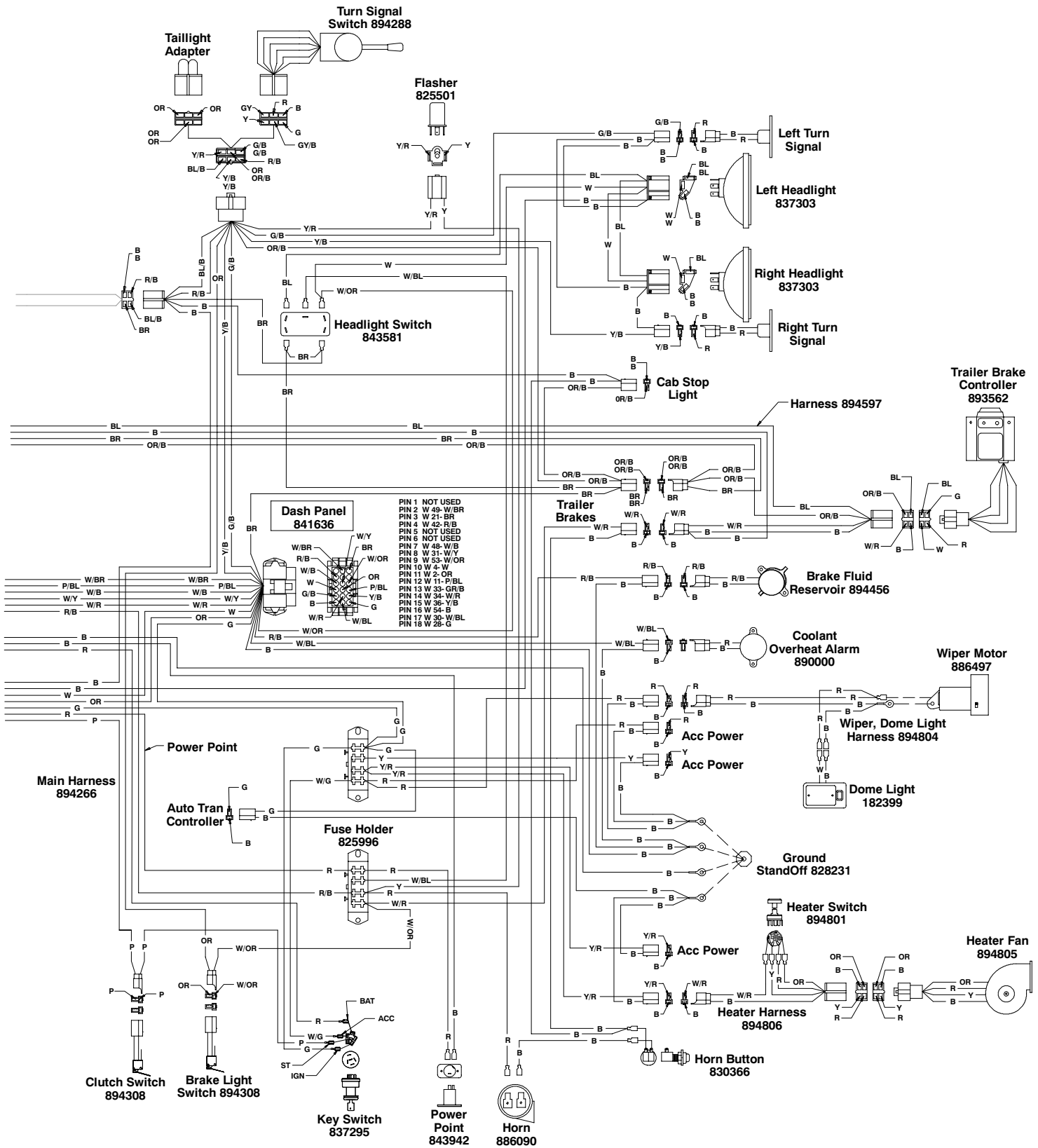
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BL - BLUE	Y - YELLOW	W/G - WHITE w/GREEN STRIPE
BR - BROWN	BL/B - BLUE w/BLACK STRIPE	W/OR - WHITE w/ORANGE STRIPE
G - GREEN	G/B - GREEN w/BLACK STRIPE	W/R - WHITE w/RED STRIPE
GY - GREY	OR/B - ORANGE w/BLACK STRIPE	W/Y - WHITE w/YELLOW STRIPE
OR - ORANGE	P/BL - PURPLE w/BLUE STRIPE	Y/B - YELLOW w/BLACK STRIPE
PK - PINK	R/B - RED w/BLACK STRIPE	Y/R - YELLOW w/RED STRIPE
P - PURPLE	W/B - WHITE w/BLACK STRIPE	
R - RED	W/BL - WHITE w/BLUE STRIPE	



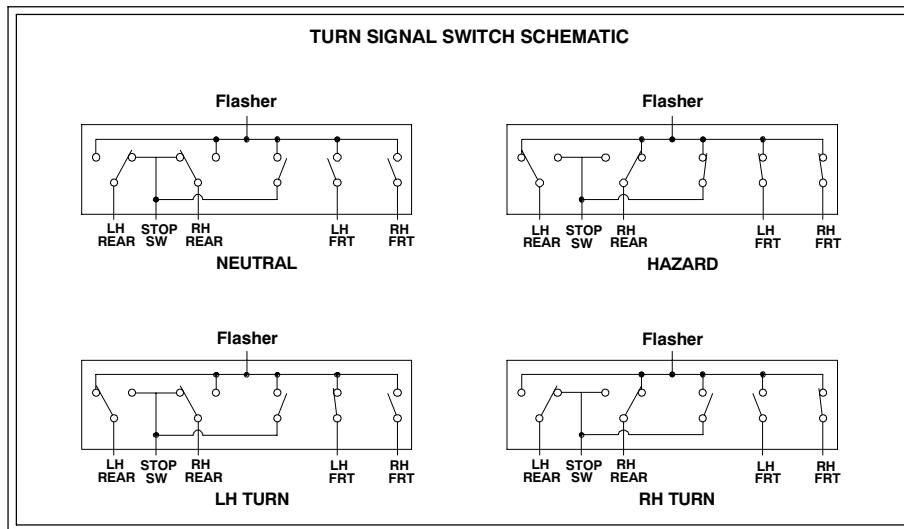
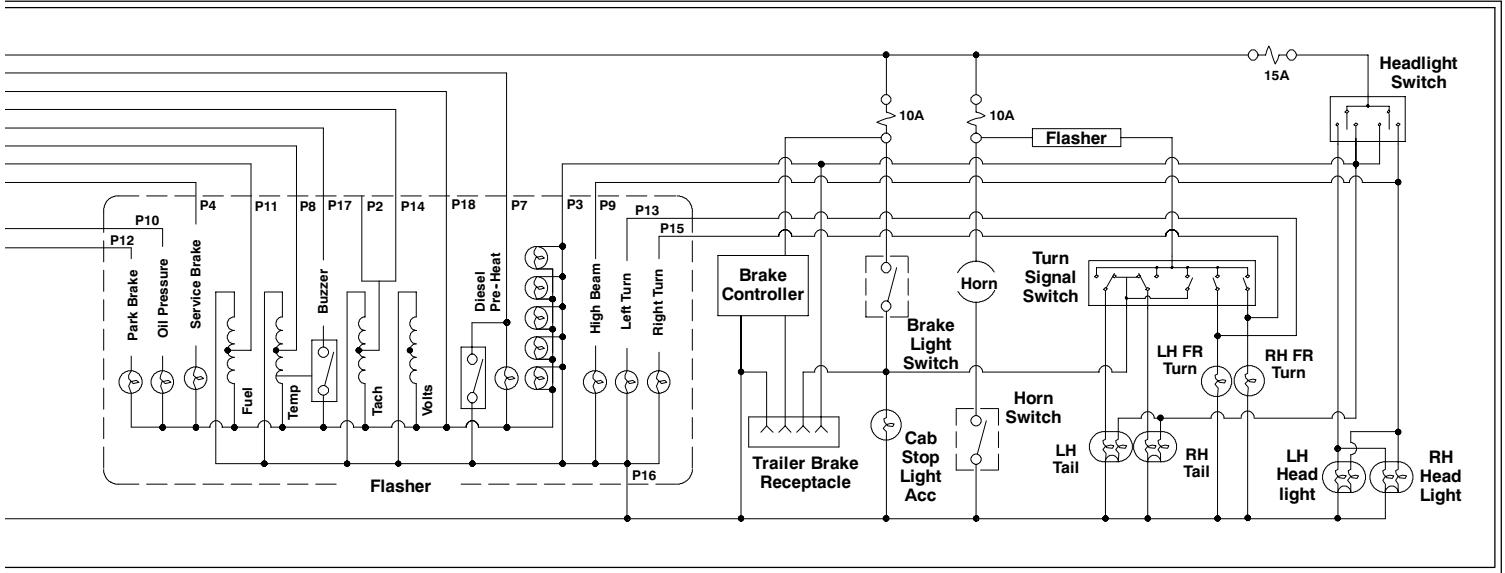


# WIRING DIAGRAM DIESEL TURF TRUCKSTER (con't.)





# WIRING SCHEMATIC DIESEL TURF TRUCKSTER (con't.)



## NOTES



Cushman Products  
P.O. Box 388 Augusta, Georgia 30903-0388 USA  
Inside USA Phone: 1-800-241-5855, FAX: 1-800-448-8124  
Outside USA Phone: 010-1-706-798-4311, FAX: 010-1-706-771-4609

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