

4095 Instant ON/OFF Valve-to turn OFF Detergent flow when not desired-Shown in the OPEN (ON) position Braided Hose-to Detergent Flow Control Valve (4110) Detergent Flow Control Valve Detergent Flow Control Adjustment Knob-DO NOT use to shut flow OFF Braided Hose-from Detergent Flow Control Valve to Junction (3063) Detergent Pump Bleeder Valve-Shown in the closed (OFF) position Braided Hose-from Detergent Pump Bleeder Valve (4220) to Inlet Water Elbow (1095) and Inlet Water Manifold (1110) **VACUUM SYSTEM** Vacuum/Blower Vacuum Elbow and Barb Assembly Vacuum Junction Block Vacuum Hose-from Vacuum

Junction Block (5025) to Vacuum

Tee (5132) at Instrument Panel

Vacuum Hose-from Vacuum Tee

(inches of Mercury) the Vacuum

measured at Vacuum Junction

Wand (3 Jet Wand shown)

Clean Out (Air Inlet) Plug

Vacuum Switch for Controlling

**HEAT TRANSFER SYSTEM** 

Coolant Wye-*inserted in Upper* 

Radiator Hose (6110) in Vehicle's

Hose-from Coolant Wye (6120) to

Return Hose-from Heat Exchanger

(3000) to Coolant Bypass Adapter

Coolant Bypass Adapter-*installed* 

between lower radiator hose (not

Thermostat-(not shown) relocated

shown) and Vehicle's engine

Air Bleed Valve-located on Heat

**6110** Vehicle's Upper Radiator Hose

Engine Compartment

Heat Exchanger (3000)

Exchanger (3000)

Operating Speed (RPM) (see 9337)

(5132) to Vacuum Guage (5120) at

Vacuum/Blower Pulley Shaft

Instrument Panel

Block (5025)

Vacuum Opening

Wand Tubing

Vacuum Tee

5132

5140

**►** 5150

5160

5170

**5120** Vacuum Gauge-indicates in Hg

**COLD WATER • HIGH PRESSURE SYSTEM** 

Pump-High Pressure Pump Pump Cylinders (3) Pulsation Dampener-no adjustment necessarv

**COLD WATER • LOW PRESSURE SYSTEM** 

Inlet Strainer (not shown)

Junction of Unloading Return

Braided Hose from Cold Water Inlet

Ball Valve-controls flow of water to

and from Fresh Water Holding Tank

Braided Hose to and from Fresh

Junction-water to and from Fresh

Water Holding Tank and to Pump

Water Pressure Reducing Valve

Inlet Water Pressure Adjustment

Lock Nut-secures adjustment

Inlet Water Elbow (see 4230)

(pre-set) no adjustment necessary

Inlet Water Manifold-*part of Pump* 

Cold Water Inlet Valve

(Bypass) Hose (2070)

(if so equipped)

of (1086)

Water Holding Tank

Inlet Water Strainer

Valve (1020)

High Pressure Gauge-should only read when system is operating and Wand Valve (Trigger) activated Quick Disconnect (not shown), for easy removal of High Pressure Gauge (2030) during Winterizing Procedure

Unloader (High Pressure Unloader) Pressure Adjustment Knob-adjust only when Wand Valve (Trigger) is activated Unloader Return (bypass) Hose-

returns water to Junction (1040) Low Pressure System when Wand Valve (Trigger) is not activated Temperature Adjusting Mixing Valve (see 3030)

Braided Hose to Pressure Relief Valve (2095)

Pressure Relief Valve (not shown) DO NOT ADJUST-will discharge water under Vehicle if pressure exceeds 1,200 PSI

**HOT WATER • HIGH PRESSURE SYSTEM** 

**3000** Heat Exchanger-*where water is* circulated through a series of coils that have been heated by the Anti-Freeze/Coolant of the Vehicle's (see 6110 through 6160)

Braided Hose from Heat Exchanger (3000) Temperature Adjusting Mixing Valve (see 2080)

Temperature Sending Unit-senses water temperature Wire, Temperature Sending Unit-

to Temperature Gauge (3045) Water Temperature Gaugedisplays temperature at Sending Unit (3040), read only when system is operating and Wand Valve (Trigger) activated

Braided Hose to Panel Manifold (3064)

**HOT WATER with DETERGENT** 

**HIGH PRESSURE SYSTEM** Junction, Detergent and Hot Water

Panel Manifold-supplies (3065), (3070), (3090) and (3100) Valve, to High Pressure Hose Reel (if so equipped) Braided Hose to High Pressure

Hose Reel (if so equipped) Hot Water Convenience Valvealso relieves pressure from entire system Hot Water Convenience Hose

Quick Connect-connection for High Pressure Hose Quick Connect-connection for High Pressure Hose Wand Valve (Trigger)

(see also 3330 if so equipped) Plunger Stem-opens and closes water flow to jet(s) shown in the closed (OFF) position O-Ring-seals Stem (3134)

Nut, Stem Access O-Ring-seals Nut (3136) O-Ring-seals water flow to Jet(s) Spring-returns Plunger Stem (3134) to the closed (OFF)

Tubing from Wand Valve to Manifold (3210) 3210 Wand Manifold

In-Line Filter- located at Inlet of Wand Valves (3130 and 3330) Wand Valve (Trigger) (see also 3130 if so equipped)

Jets (3)-note angle positioning

3334 Teflon Backer Rings (2), Stem 3335b 0-Rings (2), Stem

3336 Nut 3337 O-Ring, Nut 3338 Seat, Teflon

Spring, Stem

**DETERGENT PUMP • SUCTION AND HIGH PRESSURE SYSTEM** 

Detergent Container Strainer (not shown), located at end of Hose (4020) in Container

Hose-from Detergent Container to Inlet of Detergent Flow Meter (4030)

**Detergent Flow Meter** Indicator Ball-indicates when System is flowing Detergent Braided Hose-from Outlet of

Detergent Flow Meter to Inlet of Detergent Pump (4070) Check Valve (Inlet) Detergent Pump-High Pressure

Detergent Injecting Pump 4090 Check Valve (Outlet)

INDICATES ITEMS REQUIRING ROUTINE

from Vehicle's Engine to Thermostat Inlet Neck (6160) Thermostat Inlet Neck-*relocated* from Vehicle's Engine to Coolant

**LUBRICATION, GREASE and SERVICE POINTS** 

Bypass Adapter (6150)

**PUMP**-HIGH PRESSURE PUMP 7010 Filler Cap Braided Hose-to Oil Drain Valve (7030) located on Instrument Panel Oil Drain Valve

7040 7050 Oil Level Indicator Viewing Port Oil Level Indicator-located on Pump

**VACUUM/BLOWER** 

Grease Vent 7017 Grease Vent 7060 Grease Fitting Grease Fitting 7070 Gearcase Drain Valve Drain Valve Extension Hose

Cap-for Drain Hose Extension (7106)**7250** Oil Level Indicator 7300 Gearcase Vent

Gearcase Fill Cap 7400 7500 Vacuum/Blower Lubricating Port-access by removing Knob (7550)-located on Instrument Panel Knob (Lubricating Port)

Hose-from Vacuum/Blower Lubricating Port (7500) to Vacuum Junction Block (5025)

**SHAFT DRIVE SYSTEM** 

Drive Shaft-driven by Vehicle's Drive Pulley-for Vacuum/Blower (2 groove) Tensioner Pulley (2 groove)

Drive Pulley on Vacuum/Blower (2 groove) Tensioner Offset Plate Tensioner-*self tensioning* 

2 "V" Belts (matched) to Drive Pulley (8030) on Vacuum/Blower Drive Pulley for Pump (single groove) "V" Belt-to Electric Clutch (9395)

on Pump Tension Rail for "V" Belt on Pump Tension Rail for "V" Belt on Pump 2 "V" Belts (matched), Front Drive Belts in Vehicle's Engine

Compartment

**12V ELECTRICAL SYSTEM** 

Switch, Engage System 9318 Hour Meter

Switch, Engage Pump Switch, Engage Speed Control Normal and High Speed (Mach II) Vacuum Switch for Controlling

Operating Speed (RPM) (See 5200) Switch, Auxiliary Power

Outlet for Auxiliary Power-second outlet at rear of Recovery Tank

Electric (Front) Clutch, located on Driveshaft (8000)-in Vehicle's engine compartment Electric Clutch-located on Pump

9400 Tachometer-indicates Revolutions Per Minute (RPM) of Vehicle's

Engine Engine Overheat Sensor Switchlocated at Coolant Bypass Adapter

NOTICE: FOR PARTS AND/OR COMPONENTS THAT ARE

9460 Key Activated ON-OFF Switch

NOT SHOWN, PLEASE CALL THE BUTLER CORPORATION FOR ASSISTANCE.

CHECKS. MAINTENANCE. AND SERVICE.