



Flex Shaft Concrete Vibrators

SureSpeed and 994



VBR-UM-00043-EN-01(May 2013)

User Manual



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| | |
|----------------|-------|
| Model Number | _____ |
| Serial Number | _____ |
| Date Purchased | _____ |

⚠ WARNING

Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

GENERAL POWER TOOL SAFETY WARNINGS

NOTE: Save all warnings and instructions for future reference.

NOTE: The term power tool in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

Work Area Safety

1. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
2. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
3. Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical Safety

1. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
2. Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
3. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
4. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
5. When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
6. If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

NOTE: The term *residual current device* (RCD) may be replaced by the term *ground fault circuit interrupter* (GFCI) or *earth leakage circuit breaker* (ELCB).

Personal Safety

1. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
2. Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
3. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energized power tools that have the switch on invites accidents.
4. Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
5. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
6. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
7. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

Power Tool Use and Care

1. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
2. Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
3. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
4. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
5. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
6. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
7. Use the power tool, accessories tool bits and like equipment in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

Service

Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Emissions

1. Declared noise emission values:
 - K = 0.69 dB
 - $L_{pA} = 83.1$ dB
 - $L_{WA} = 94.1$ dB
2. Wear hearing protection.
3. Declared vibrator emissions:
 - Front Handle = 4.28 m/s²
 - K = 1.50 m/s²
 - Rear Handle = 2.41 m/s²
 - K = 1.50 m/s²
4. The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another. The declared vibration total value may also be used in a primary assessment of exposure.

⚠ WARNING

The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used.

SAFETY SYMBOL EXPLANATIONS

| | |
|------|---------------------------------------|
| V | Volts |
| A | Amperes |
| Hz | Hertz |
| ~ | Alternating Current |
| ⊞ | Class II Tool |
| IPX4 | IP Symbol |
| ⏚ | Ground Terminal (Protective Earthing) |
| I | ON |
| ○ | OFF |
| 👤📖 | Refer to Instruction Manual |
| ▴▱▭ | Variability in Steps |

Figure 1: Safety symbols

Additional Safety Note

Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three-wire grounded power cord and grounded power supply system.

| Item | Description | Quantity | WVD1 | WVG1 | WSD1 | WSG1 | WSG2 |
|------|------------------------------------|----------|------|------|----------|------|----------|
| 1 | D-Ring | 2 | | | W819014 | | W819014 |
| 2 | Filter, Intake | 1 | | | W423132 | | W423132 |
| 3 | Carriage Screw; 10-32, 3/4 in. | 9 | | | W423140 | | W423140 |
| 4 | Acorn Nut, Self-locking; 10-32 UNF | 9 | | | W423141 | | W423141 |
| 5 | Assembly, Brush & Spring; 115 V AC | 2 | | | W423117 | | ----- |
| 5 | Assembly, Brush & Spring; 230 V AC | 2 | | | ----- | | W423118 |
| 6 | Brush Cap with O-Ring | 2 | | | W423114 | | W423114 |
| 7 | Casing Connector | | | | | | |
| 8 | Variable Speed Switch | | | | | | |
| | 514-O Non-foaming Vibrator Oil | 14 oz | | | W655-143 | | W655-143 |
| | Strap, Carry (not shown) | 1 | | | W819013 | | W819013 |
| | 514-B Shaft Lubricant | 14 oz | | | W655-140 | | W655-140 |
| | Permatex | 11 oz | | | W657055 | | W657055 |

See Figure 2 for parts locations

Table 1: Concrete vibrator replacement parts

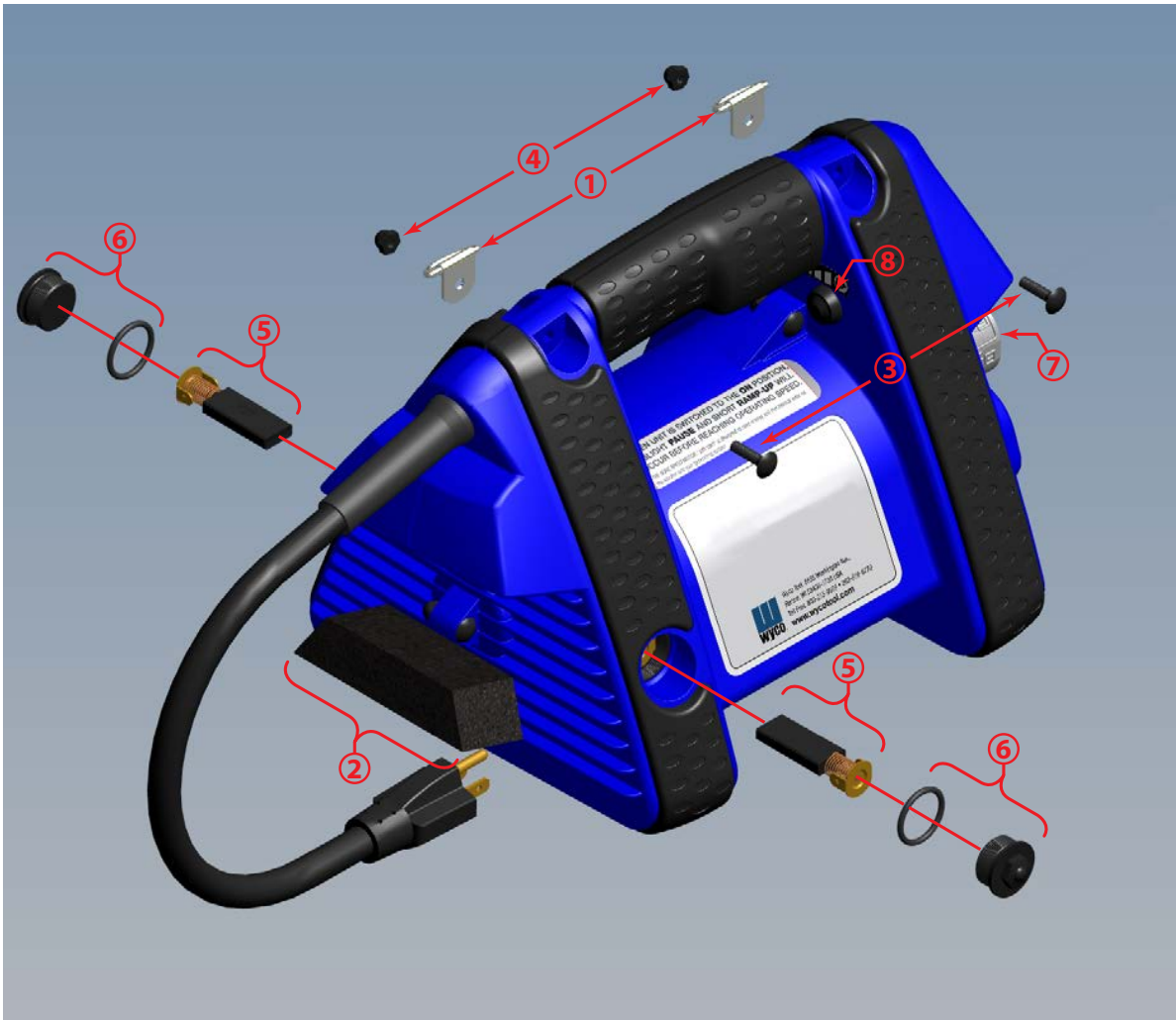


Figure 2: Parts locations

INTRODUCTION

This concrete vibrator motor is used to power concrete flex shaft vibrators which provide vibration to consolidate freshly poured concrete. The vibration is created by an eccentric (off center) weight within the vibrator head. As the weight spins it forces the head housing to move within the fresh concrete. The continuous head movement agitates the concrete mixture resulting in significantly reduced voids.

This motor can be used with any valid Wyco vibrator head and shaft combination. Table 2 is provided to show the commonly used head and shaft combinations. Shafts are available in lengths of 2, 5, 7, 10, 14, 20, and 30 feet.

⚠️WARNING

Do not use non-approved parts. The use of non-approved parts may cause a hazardous condition for the operator.

| Vibrator Head | | Vibrator Shaft | |
|---------------|----------|----------------|-----------|
| Size (in) | Model No | Length | CK Series |
| 13/16 in. | 750-D | 2-20 ft | 8900 |
| 1 in. | 750-EH | | |
| 1-3/8 in. | 750-FI | 2-20 ft | 9500 |
| 1-3/4 in. | 750-GI | | |
| 2 in. | 750-LI | | |
| 2-1/4 in. | 750-MI | | |
| 2-1/2 in. | 750-SBI | | |
| 1-3/8 in. | 750-FI | 30 ft | |

Table 2: Head and shaft combinations

OPERATION

Before Starting the Motor

⚠️DANGER

Do not use damaged equipment. Inspect the vibrator for damage prior to using this equipment. Read, understand and follow all safety and maintenance instructions in this manual. Carefully check that the power cord has no cuts or exposed wires and that the vibrator housing is intact.

⚠️DANGER

Do not start the motor without a shaft connected. The exposed shaft connection presents a safety hazard as it rotates at high speed. Clothing or skin may become entangled in the shaft connection causing injury.

Ensure that the motor, shaft and head are connected securely as described in the maintenance instructions.

Ensure that the power plug is connected to the appropriate power source.

Ensure that the motor is not immersed in concrete and that any cord connections are not in water or fresh concrete.

Turn vibrator on by moving the rocker switch to the "I" (on) position. (See Figure 2 for switch location.)

NOTE: The motor has been designed with a soft start and will slowly ramp up to speed over a 1 second period.

Insert the vibrator head into the concrete to be consolidated.

Do not run the vibrator head outside of fresh concrete for an extended period of time. The vibrator depends on moving concrete to cool the bearings.

Avoid sharp bends in the flex shaft during operation. Sharp bends reduce shaft life.

Remove the vibrator head from concrete and turn the rocker switch to the "O" (off) position. (See Figure 2 for switch location.)

Variable Speed Control Models Only

The variable speed option allows the operator to choose between 8000, 10,500, and 12,000 VPM (Vibrations Per Minute).

NOTE: This instruction only pertains to model numbers that start with WV).

NOTE: See [Figure 2](#) for switch and button locations.

When the power switch is turned on, the motor will always start at 10,500 VPM. From the time the power is applied there is a 20 second window in which to choose one of the alternate motor speeds.

Holding the speed control button for 1 second will change the motor speed to 8000 VPM. Releasing the speed control button and then pressing it again for 1 second will increase the motor speed to 12,000 VPM.

Releasing and then pressing the speed control button a third time for 1 second will return the motor to 10,500 VPM. To reset the 20 second speed change period, the power switch must be turned off and then on again.

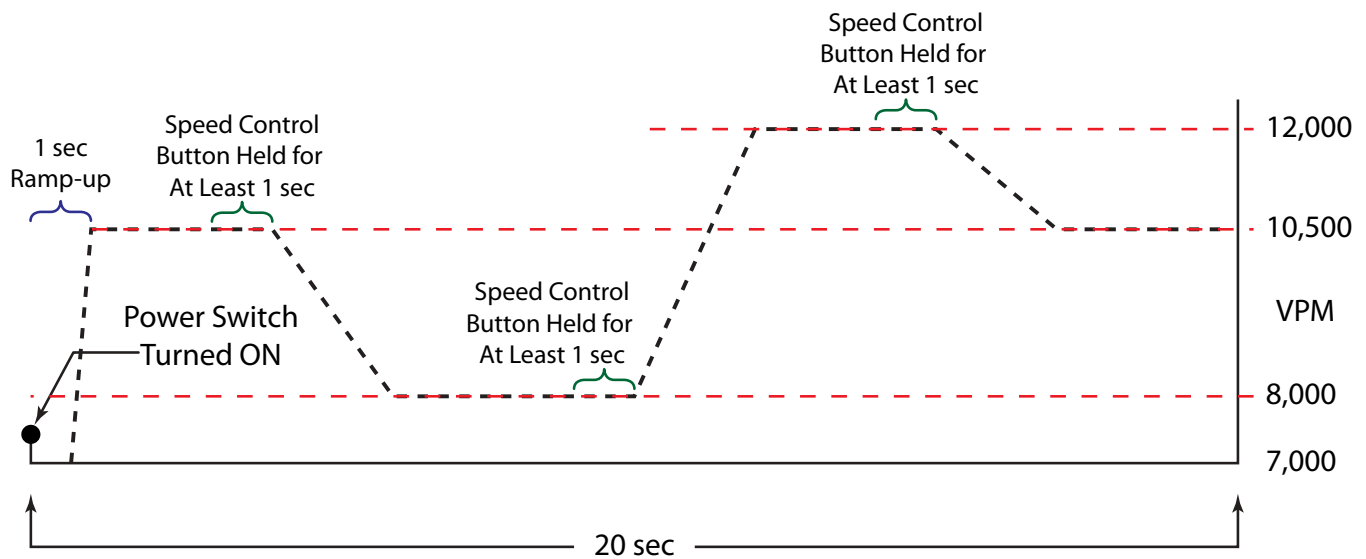


Figure 3: Variable speed control timing

SETUP

The motor has several options for connecting the core and casing assembly to the motor housing. A diagram of all connection options is found in [Figure 13](#).

Connecting the Vibrating Casing (Quick Disconnect Connections)

NOTE: The casing must be fitted with a quick disconnect end.



Figure 4: Quick disconnect fitting

1. Be sure the lever on the quick disconnect connector on the motor is in the up position. (See [Figure 4](#))

Locate the core and casing. Identify the side of the casing that has the connection arrow and position the casing with the arrow face to the left as viewed from the vibrator head end. (See [Figure 5](#)).

This side should face to the left when the casing is held directly behind the quick disconnect.



Figure 5: Casing arrow location

2. Align the end of the core with the driver inside the quick disconnect fitting on the motor.
3. Align the arrows on the casing end with the unlock icon on the quick disconnect connector. The unlock and lock positions are shown by the unlock and lock icons ([Figure 6](#)) on the side of the quick disconnect fitting. (See [Figure 7](#))

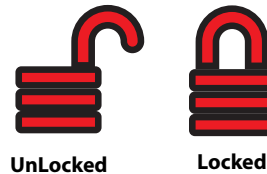


Figure 6: Unlock/Lock icons

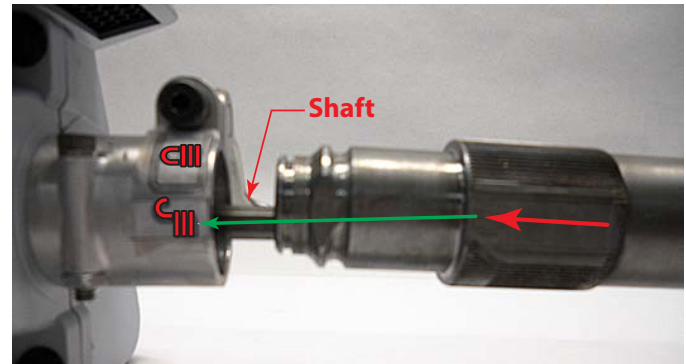


Figure 7: Core/Casing alignment

4. Insert the casing being sure to line up the shaft and driver so the shaft slides into the driver.
5. When seated rotate the casing until the arrow lines up with the lock icon on the quick disconnect connector.
6. The final step is to push down on the locking lever to clamp the casing into the quick disconnect connector. The locking lever should bottom out on the side of the quick disconnect connector.

NOTE: If the casing feels loose or too tight after pushing down on the locking lever, raise the lever until the lever is horizontal then rotate the hex head screw with a #4 Allen wrench in either direction to tighten or loosen. Be careful to not loosen the lever too far or the lever bushing and screw will un-thread and could fall apart. After the adjustments are completed, push lever back down to bottom out to connector. This procedure may need to be repeated to get desired tight or lose condition. (See [Figure 8](#))



Figure 8: Locking lever adjustment

Disconnecting the Vibrator Casing (Quick Disconnect)

1. Be sure the quick disconnect lever on the motor is in the up position.
2. Rotate the core and casing from the lock position to the unlock position.
3. Pull the casing end straight out of the quick disconnect connector on the motor.
4. Be sure that the lever is in the down position when storing the motor to avoid damage to the lever.

Connecting the Vibrating Casing (Threaded Connections)

NOTE: The casing must be fitted with a thread connector end.



Figure 9: Threaded casing connector

1. Align the end of the core and casing with the shaft inside the threaded motor connector.

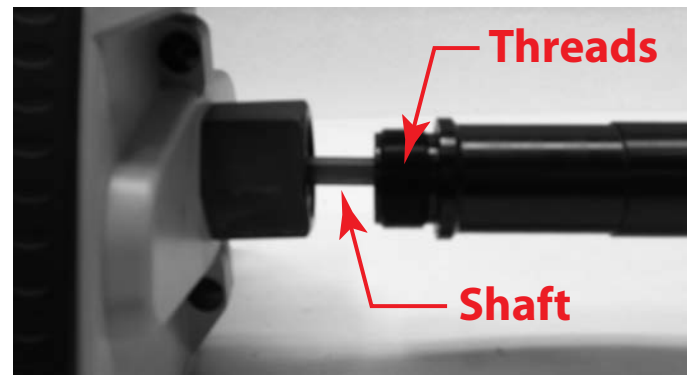


Figure 10: Shaft insertion

2. Hold the casing end firmly and carefully rotate the casing assembly to the right to thread the casing end into the motor assembly. (See [Figure 11](#))
3. Once threads are started rotate motor assembly until the motor assembly stops turning.

NOTE: The motor may be taken off of the work surface allowing the motor housing to spin in the air while holding onto the casing end with a hand or with vise.



Figure 11: Motor rotation

4. Tighten motor onto casing at the hex motor connector using an adjustable wrench.



Figure 12: Hex motor connection

NOTE: Do not over tighten or reef as this may damage the plastic motor housing. Do not tighten with the motor on a solid surface. This may also result in damage to the housing.

5. The vibrator assembly is now ready to use.

Disconnecting the Vibrator Casing (Threaded Connector)

1. Carefully loosen the hex motor connector using an adjustable wrench until the motor assembly freely turns.

NOTE: If casing end is too tight you will need to use a vise to loosen so not to damage motor assembly. Be sure to grip the casing end in the vise not the motor connector.

2. Carefully rotate the motor until the motor and the casing separate from one another. Be careful when withdrawing to not pull the core end too far out of the casing end or the head will have to be removed to realign the core with the head driver.
3. The motor and casing are now ready for storage.

The motor can accommodate any of the 750 series core and casings.

The motor is ordered as either a dedicated quick disconnect connection or a dedicated threaded connection version.

If the threaded version was ordered it cannot be used with the quick disconnect core and casing. If the quick disconnect version was ordered threaded core and casings can be used with the addition of a thread to quick disconnect adapter.

The configuration options are shown in [Figure 13](#).

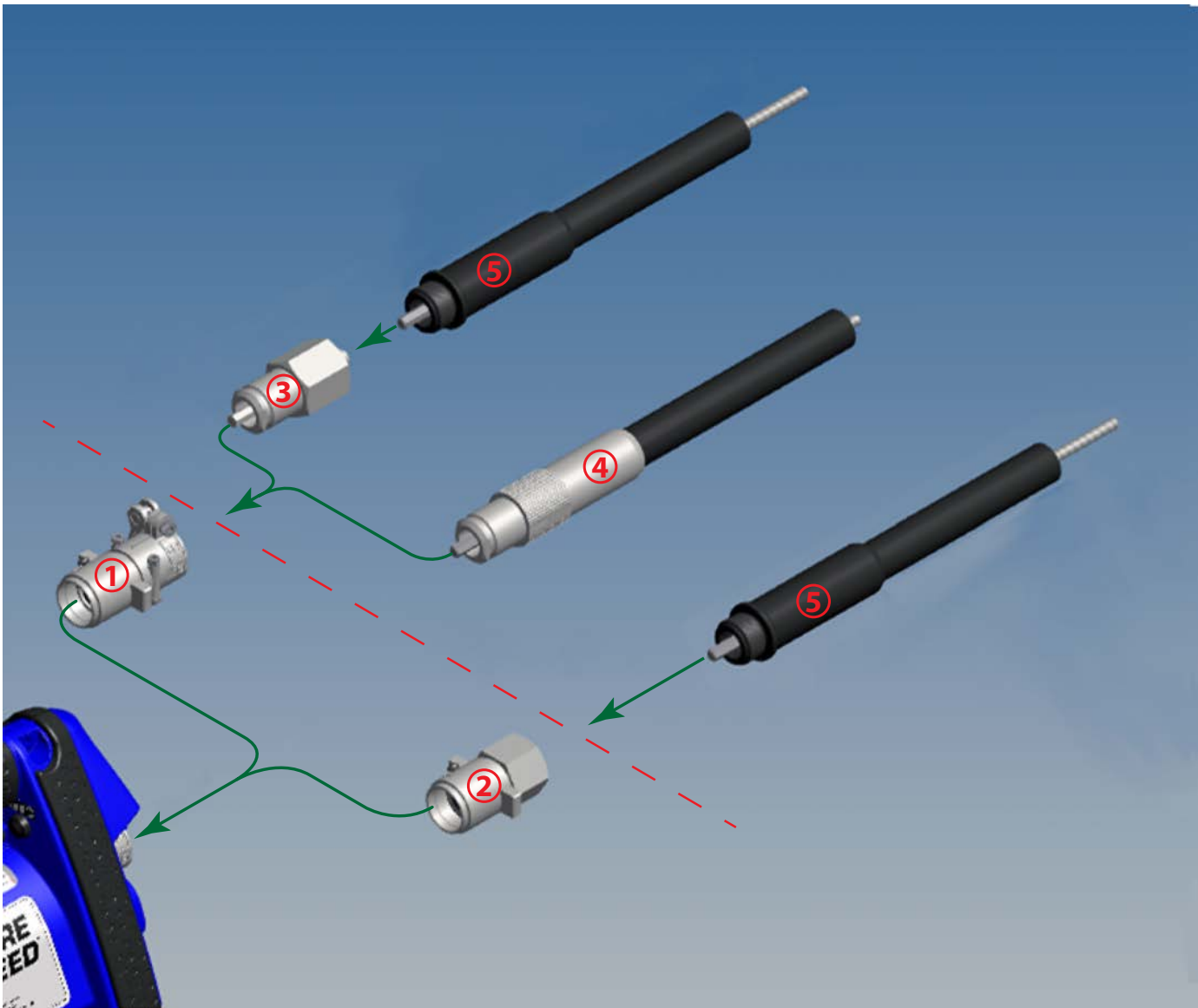


Figure 13: Core and casing configurations

| Item | Description | Notes |
|------|--------------------------------------|--|
| 1 | Quick Disconnect Motor End | These motor ends are part of the motor assembly. They are not interchangeable and are part of the specific part number |
| 2 | Threaded Motor End | |
| 3 | Threaded to Quick Disconnect Adapter | Wyco PN W423-500 allows threaded core and casings to be used with quick disconnect motor. |
| 4 | Quick Disconnect Core and Casing | - |
| 5 | Threaded Core and Casing | - |

Table 3: Core and casing options

PREVENTIVE MAINTENANCE

Wyco vibrator motors are designed to operate 50 to 100 hours between normal preventive maintenance intervals. The service instructions below should be followed to perform the preventive maintenance.

⚠️WARNING

There are no user serviceable parts contained within the motor housing. Opening the motor housing may be dangerous and will void the warranty. Any repairs that require opening the motor housing should be performed at an authorized Wyco service center or at the Wyco factory. Use only factory authorized replacements parts.

Brush Removal

For the location of the parts used in the following procedures see .

1. Disconnect the line cord from power source.
2. Lay the motor on its side with brush cap (6) facing upwards.
3. Use a 1/2 inch (6-sided) socket to unscrew the plastic brush cap (6) from the motor half.
4. The brush spring (5) will pop out. Carefully remove the brush spring by gently pulling on the spring.
5. Repeat steps for the opposite side.

Brush Replacement

NOTE: Brushes should be replaced in pairs.

1. Inspect and replace damaged O-rings if necessary.
2. Lubricate the O-ring prior to cap installation
3. Align new brush (5) with brush holder and insert.
4. Push the spring into the holder as the brush cap is screwed back into the housing.

NOTE: The O-ring must be on the brush cap before screwing into the housing.

5. Torque the brush cap to 35 in. lb.
6. Repeat steps for opposite side.

Filter Replacement

1. Pull the old filter down from the housing with your fingers.
2. Place the new filter (2) in the housing, tapered side up. (See [Figure 2](#))

ELECTRIC VIBRATOR HEAD SERVICE & MAINTENANCE

Installing or Replacing Vibrator Head Quick Disconnect Fitting.

The motor is shipped with a quick disconnect body (PN W113715) and a core plug (PN W764733). If the vibrator shaft assembly hasn't been converted to quick disconnect fittings, the conversion will have to be preformed before the shaft can be connected to the motor.

1. Remove the protective cap from the motor end of the vibrator shaft Remove any dirt or corrosion from the threads.
2. Place the nylon core plug into the open end of the core casing with the flange side up.
3. With a rubber mallet begin to tap the core plug into the casing. Stop when the plug just reaches the tip of the core.
4. Align the core with the hole in the core cap and continue to tap the cap until the flange is resting on the top edge of the casing.
5. Apply some oil to the casing threads and thread the quick disconnect body onto the casing over the core plug.
6. Tighten the quick disconnect body finger tight and then an additional quarter turn with a pipe wrench or channel lock pliers.

IMPORTANT Service the vibrator head after every 50 hours of operation to ensure trouble-free running on the job.

When servicing, always replace hex driver, seals and bearings (or bushing for 750-D & 750-EH heads). (See [Electric Vibrator Head Assembly Drawings & Parts Lists on page 17](#))

All heads are equipped with seals at the flexible shaft end and contain oil. The seals serve a double purpose; to keep the oil in the head and to keep the grease from the flexible shaft out of the head.

1. Hold the nose end in a vise and unscrew the end cap (counterclockwise) with a chain wrench or a good pipe wrench. (See [Figure 14](#))



Figure 14: End cap removal

2. Pull the eccentric rotor assembly out of the housing. If the bearings are stuck and you have difficulty removing them from the housing, screw the end cap partly back into the housing and bounce the head and cap down on a block of wood in order to loosen the bearings from their seat, then pull out the rotor assembly. (See [Figure 15](#))



Figure 15: Bearing Removal

NOTE: Hexagon driver has left-hand threads.

3. Flush rotor assembly and housing with solvent and wipe all parts clean. Replace bearings, seals and hex driver. Maintain concentric alignment of hex driver with respect to rotor shaft Refill with proper amount of Wyco No. 514-O non-foaming vibrator oil. (See [Table 4](#)) Apply Loctite 545 adhesive/sealant or equivalent to threads on both ends of rotor.

| Head Model | Head Size | Oil Required |
|----------------|---------------|--------------|
| 750-D | 13/16" Square | 1/2 ounce |
| 750-EH | 1" Square | 3/4 ounce |
| 750-FI | 1-3/8" Square | 1 ounce |
| 750-GI | 1-3/4" Square | 1-1/4 ounces |
| 750-LI | 2" Square | 2 ounces |
| 750-MI | 2-1/4" Square | 3-1/2 ounces |
| 750-SBI | 2-1/2" Round | 1-1/4 ounces |

Table 4: Head oil requirements

4. Replace rotor assembly in head housing. Apply Loctite 545 adhesive/sealant or equivalent all around the threads of the end cap. Tighten and wipe off excess Loctite 545 adhesive/sealant.

Flexible Shaft - Lubrication

When vibrators are shipped completely assembled from the factory, the shafts are lubricated and broken-in. If separate cores and casings are shipped, they require the following lubrication and break-in procedure. Core and casing combinations should be checked for lubricant levels at least every 50 hours.

To lubricate, lightly coat the core with grease (Wyco 514-B shaft lubricant) while inserting it into the casing. Do not over lubricate. Surplus lubricant may get past the seal in the vibrator head. Over lubrication will also increase the amount of torque required to operate the vibrator, resulting in additional stress on the motor and possibly early core and casing failure.

When adding lubricant on the job, after each 50 hours of operation, loosen the casing from the motor and pull out the core about 15...18 inches. Apply lubricant as above to the exposed section of core. Reinstall the core ensuring that it engages with the vibrator head. During operation the grease will travel the full length of the casing.

A break-in procedure is required after the assembly of separately shipped core and casing. This procedure involves repeatedly coiling the flex shaft from the head to the motor while the motor is running. The coiling and uncoiling should be repeated at least 3 times to ensure proper break-in.

NOTE: For shorter core and casing combinations coiling isn't possible. Break-in for short core and casings requires bending into a "U" shape instead of a coil.

Water is one of the greatest enemies of satisfactory performance of vibrator heads. As the head is submerged in the mix, water and cement can infiltrate into the head unless precautions are taken. In addition to securely tightening the head onto the flexible shaft, the threads on the head and shaft must be coated with Permatex Form-A-Gasket No. 2. This must be done each and every time that the head is removed and reinstalled.

Extension Cords

When selecting an extension cord for use with Wyco electric motor cord sets using a 3-prong polarized plug, an equivalent plug set must be used for the *Grounded* version.

IMPORTANT A grounded motor requires a grounded extension cord.

A 2-prong extension cord may be used for the *Double Insulated* motor. Extension cords must be approved for outdoor use and the wire gauge of the cord must be appropriate for the expected load from the following table.

| Motor Type | Voltage | Rated Amps | Minimum Wire Size | Maximum Cord Length (ft) |
|------------|---------------------|------------|-------------------|--------------------------|
| WSD1 | 115 V AC (±15 V AC) | 15 | 14 AWG | 100 |
| WSG1 | | | 12 AWG | 150 |
| WVD1 | | | | |
| WVG1 | 230 V AC (±30 V AC) | 7.5 | 16 AWG | 100 |
| WSG2 | | | 14 AWG | 150 |
| WVG2 | | | | |

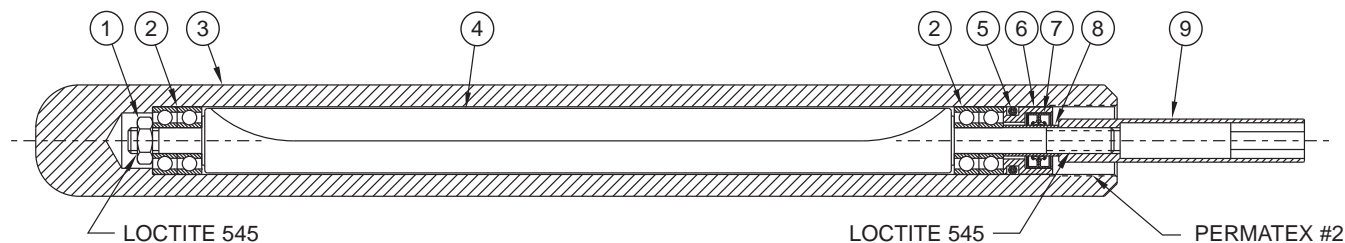
Table 5: Extension cord wire minimum size requirements

ELECTRIC VIBRATOR HEAD ASSEMBLY DRAWINGS & PARTS LISTS

| Vibrator Head Model | Marking on End Cap | Square Size (in.) | Assembly Part No | Vibrator Head Model | Marking on End Cap | Square Size (in) | Assembly Part No |
|---------------------|--------------------|-------------------|------------------|---------------------|--------------------|------------------|------------------|
| 750-D | D | 3/16 in. | W877-520 | 750-GI | 1.75B | 1-3/4 in. | W878-540 |
| 750-EH | EH | 1 in. | W877-526 | 750-LI | 2.00B | 2 in. | W878-563 |
| 750-FI | 1.38B | 1-3/8 in. | W878-533 | 750-MI | 2.25B | 2-1/4 in. | W878-568 |

NOTE: Vibrator head model 750-SBI is a 2-1/2 inch round head with no end cap marking. Assembly PN is # W877-512.

Vibrator Head Model 750-D

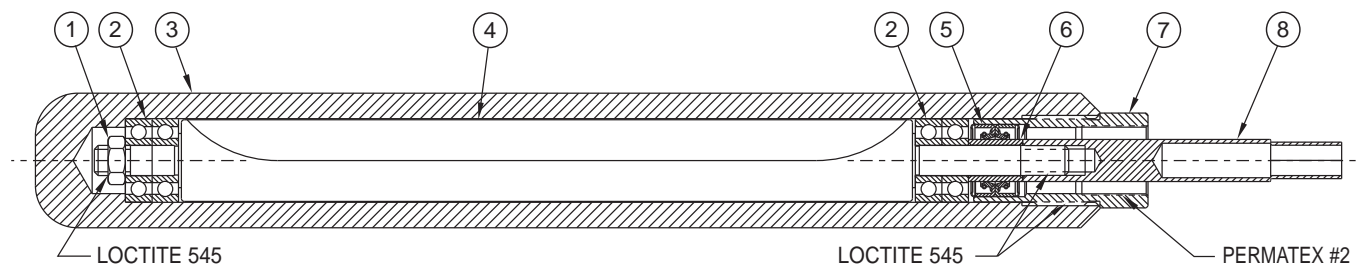


| Item | Description | Quantity | Part No. |
|------|-----------------|----------|----------|
| 1 | Nut, Hex Jam | 1 | W435638 |
| 2 | Bearing, Ball | 4 | W097011 |
| 3 | Housing, Square | 1 | W587320 |
| 4 | Rotor | 1 | W717340 |
| 5 | O-Ring, Buna | 1 | * |

| Item | Description | Quantity | Part No. |
|------|--------------|----------|----------|
| 6 | Holder, Seal | 1 | * |
| 7 | Seal, Oil | 2 | * |
| 8 | Bushing | 1 | * |
| 9 | Driver, Hex | 1 | W382428 |

* All of these items available assembled in a kit, PN W747-540.

Vibrator Head Model 750-EH

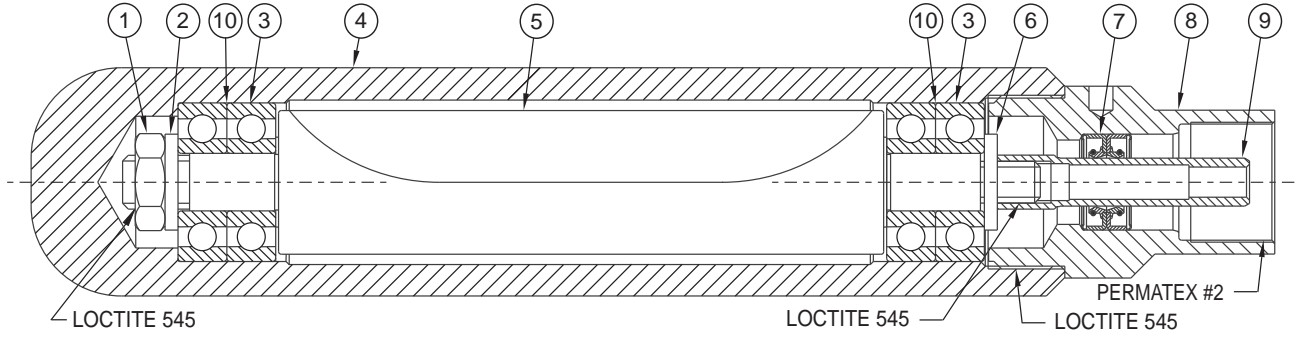


| Item | Description | Quantity | Part No. |
|------|-----------------|----------|----------|
| 1 | Nut, Hex Jam | 1 | W432710 |
| 2 | Bearing, Ball | 4 | W097012 |
| 3 | Housing, Square | 1 | W587325 |
| 4 | Rotor | 1 | W717345 |
| 5 | Seal, Oil | 2 | ** |

| Item | Description | Quantity | Part No. |
|------|-------------|----------|----------|
| 6 | Bushing | 1 | W177325 |
| 7 | End Cap | 1 | ** |
| 8 | Driver, Hex | 1 | W384447 |

** End cap assembly with seals is PN W207-248.
(Order bushing separately.)

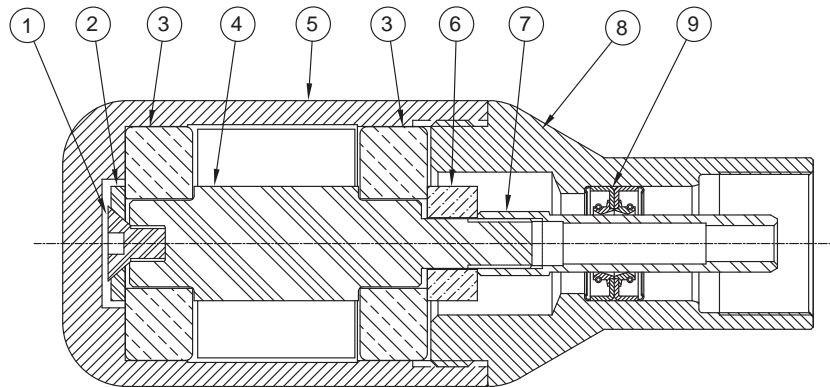
Vibrator Head Models 750-FI, 750-GI, 750-LI, and 750-MI



| Item | Description | Quantity | Part No. for 750-FI (1.38B) | Part No. for 750-GI (1.75B) | Part No. for 750-LI (2.00B) | Part No. for 750-MI (2.25B) |
|------|-----------------|----------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1 | Nut, Hex Jam | 1 | W432708 | | W432707 | |
| 2 | Washer, Flat | 1 | W887015 | | W887011 | |
| 3 | Bearing, Ball | 4 | W096013 | W096010 | W096011 | W096020 |
| 4 | Housing, Square | 1 | W588331 | W588339 | W588354 | W588368 |
| 5 | Rotor | 1 | W718357 | W718335 | W717360 | W718365 |
| 6 | Washer, Flat | 1 | W887015 | | W887016 | |
| 7 | Seal, Oil | 2 | *** | | | |
| 8 | End Cap | 1 | *** | | | |
| 9 | Driver, Hex | 1 | W384446 | | | |
| 10 | Shim | 2 | W419701 | | N/A | |

*** Manufacturer suggests using end cap with pressed in seals: 1.38B - PN W208-231; 1.75B - PN W208-236; 2.00B - PN W208-261; 2.25B - PN W208-268. However, seal and end cap are available separately upon request.

Vibrator Head Model 750-SBI



| Item | Description | Quantity | Part No. |
|------|-------------------|----------|----------|
| 1 | Screw, Hex Socket | 1 | W437510 |
| 2 | Washer, Flat | 1 | W887017 |
| 3 | Bearing, Ball | 2 | W099910 |
| 4 | Rotor | 1 | W717310 |
| 5 | Housing | 1 | W587310 |

| Item | Description | Quantity | Part No. |
|------|----------------|----------|----------|
| 6 | Washer, Spacer | 1 | W887018 |
| 7 | Driver, Hex | 1 | W384446 |
| 8 | End Cap | 1 | W207268 |
| 9 | Seal, Oil | 2 | W747504 |

RESTRICTIONS OF HAZARDOUS SUBSTANCES (RoHS) DIRECTIVE

This product is compliant with the RoHS Directive identified on the Declaration of Conformity associated with this product. This product does not contain lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in quantities exceeding the following maximum concentration value levels:

| | |
|---------------------------------------|---|
| Lead | 0.1% by weight in homogenous materials |
| Mercury | 0.1% by weight in homogenous materials |
| Hexavalent Chromium | 0.1% by weight in homogenous materials |
| Polybrominated Biphenyls (PBB) | 0.1% by weight in homogenous materials |
| Polybrominated Diphenyl Ethers (PBDE) | 0.1% by weight in homogenous materials |
| Cadmium | 0.01% by weight in homogenous materials |

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE) DIRECTIVE



In the European Union, this label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.

For information on how to recycle this product responsibly in your country, please visit:

www.racinefed.com/recycle/

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Wyco Warranty

SureSpeed/994 Concrete Vibrator

PRODUCTS COVERED

The Wyco warranty shall apply to the SureSpeed/994 Concrete Vibrator ("Product").

MATERIALS AND WORKMANSHIP

Wyco warrants the Product to be free from defects in materials and workmanship for a period of 12 months from the original purchase date.

PRODUCT RETURNS

Product failures must be proven and verified to the satisfaction of Wyco. The Wyco obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Wyco receiving written notice of any asserted defect within 10 (ten) days after its discovery. If the defect arises and a valid claim is received within the Warranty Period, at its option, Wyco will either (1) exchange the Product with a new, used or refurbished Product that is at least functionally equivalent to the original Product, or (2) refund the purchase price of the Product. **DO NOT RETURN ANY PRODUCT UNTIL YOU HAVE CALLED THE WYCO CUSTOMER SERVICE DEPARTMENT AND OBTAINED A RETURN AUTHORIZATION.**

Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Wyco factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product. A replacement Product assumes the remaining warranty of the original Product or ninety (90) days from the date of replacement, whichever provides longer coverage.

LIMITS OF LIABILITY

This warranty shall not apply to any Product repaired or altered by any Party other than Wyco. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with Wyco instructions. The warranty shall not apply and shall be void with respect to a Product exposed to conditions other than those detailed in applicable technical literature and Installation and Operation Manuals (IOMs) or which have been subject to vandalism, negligence, accident, acts of God, improper installation, operation or repair, alteration, or other circumstances which are beyond the reasonable control of Wyco.

With respect to products not manufactured by Wyco, the warranty obligations of Wyco shall in all respects conform and be limited to the warranty extended to Wyco by the supplier.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of title).

Any description of a Product, whether in writing or made orally by Wyco or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with any Customer's order are for the sole purpose of identifying the Product and shall not be construed as an express warranty. Any suggestions by Wyco or its agents regarding use, application or suitability of the Product shall not be construed as an express warranty unless confirmed to be such, in writing, by Wyco.

EXCLUSION OF CONSEQUENTIAL DAMAGES AND DISCLAIMER OF OTHER LIABILITY

Wyco liability with respect to breaches of the foregoing warranty shall be limited as stated herein. Wyco liability shall in no event exceed the contract price. **WYCO SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY, (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY WYCO, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.**