

# OPERATION AND PARTS MANUAL



# *Mikasa*

## Vibration Roller Model MRH-800DS (Diesel)

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Revision #3 (02/02/05)



**MULTIQUIP INC.**

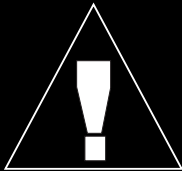
18910 WILMINGTON AVE.  
CARSON, CALIFORNIA 90746  
310-537-3700  
800-421-1244  
FAX: 310-537-3927

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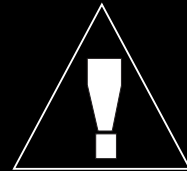
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**PARTS DEPARTMENT:**

800-427-1244  
FAX: 800-672-7877  
**SERVICE DEPARTMENT/TECHNICAL ASSISTANCE:**  
800-478-1244  
FAX: 310-631-5032



# WARNING



## **CALIFORNIA — Proposition 65 Warning**

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

## **HERE'S HOW TO GET HELP**

*PLEASE HAVE THE MODEL AND SERIAL  
NUMBER ON-HAND WHEN CALLING*

### ***PARTS DEPARTMENT***

*800-427-1244 or 310-537-3700*

*FAX: 800-672-7877 or 310-637-3284*

### ***SERVICE DEPARTMENT***

*800-421-1244*

*FAX: 310- 537-4259*

### ***TECHNICAL ASSISTANCE***

*800-478-1244*

*FAX: 310- 631-5032*

### ***WARRANTY DEPARTMENT***

*888-661-4279, or 310-661-4279*

*FAX: 310- 537-1173*

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## MIKASA MRH-800DS-VIBRATION ROLLER

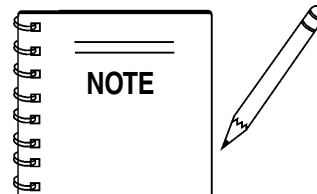
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## Yanmar L100ee-DEVMK2 Engine

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**Specification and part number are subject to change without notice.**

# PARTS ORDERING PROCEDURES

## When ordering parts, please supply the following information:

- Dealer account number
- Dealer name and address
- Shipping address (if different than billing address)
- Return fax number
- Applicable model number
- Quantity, part number and description of each part
- Specify preferred method of shipment:
  - ✓ FedEx or UPS Ground
  - ✓ FedEx or UPS Second Day or Third Day
  - ✓ FedEx or UPS Next Day
  - ✓ Federal Express Priority One
  - ✓ DHL
  - ✓ Truck

*Note: Unless otherwise indicated by customer, all orders are treated as "Standard Orders", and will ship within 24 hours. We will make every effort to ship "Air Shipments" the same day that the order is received, if prior to 2PM west coast time. "Stock Orders" must be so noted on fax or web forms.*



## Here's how to get help...

Please have the model and serial number on hand when calling.

### Parts Department

800-427-1244 Fax: 800-672-7877  
310-537-3700 Fax: 310-637-3284

### Mayco Parts

800-306-2926 Fax: 800-672-7877  
310-537-3700 Fax: 310-637-3284

### Service Department

800-478-1244 Fax: 310-537-4259  
310-537-3700

### MQ Power Service Department

800-835-2551 Fax: 310-638-8046  
310-537-3700

### Warranty Department

800-421-1244, Ext. 279 Fax: 310-537-1173  
310-537-3700, Ext. 279

### Multiquip's Main Phone Numbers

800-421-1244 Fax: 310-537-3927  
310-537-3700

## Place Your Parts Order Via Web or Fax For Even More Savings!

### Extra Discounts!

All parts orders which include complete part numbers and are received by our automated web parts order system, or by fax qualify for the following extra discounts:

| Ordered via | Standard orders | Stock orders (\$750 list and above) |
|-------------|-----------------|-------------------------------------|
| Fax         | 3%              | 10%                                 |
| Web         | 5%              | 10%                                 |

### Special freight allowances when you order 10 or more line items via Web or Fax! \*\*

FedEx Ground Service **at no charge for freight**  
No other allowances on freight shipped by any other carrier.

NOTE: DISCOUNTS ARE SUBJECT TO CHANGE



**MULTIQUIP INC.**  
18910 WILMINGTON AVENUE  
POST OFFICE BOX 6254  
CARSON, CALIFORNIA 90749  
310-537-3700 • 800-421-1244  
FAX: 310-537-3927  
E-MAIL: mq@multiquip.com  
WWW: multiquip.com

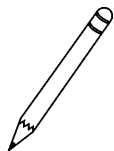
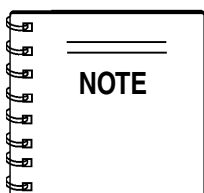
**Direct TOLL-FREE access  
to our Parts Department:**

Toll-free nationwide — 800-427-1244

# MRH-800DS — SAFETY MESSAGE ALERT SYMBOLS

## FOR YOUR SAFETY AND THE SAFETY OF OTHERS!

Safety precautions should be followed at all times when operating this equipment. Failure to read and understand the Safety Messages and Operating Instructions could result in injury to yourself and others.



This Owner's Manual has been developed to provide complete instructions for the safe and efficient operation of the Multiquip Model MRH-800DS Vibration Roller. Refer to the engine manufacturer's instructions for data relative to its safe operation.

**Before using this vibration roller, ensure that the operating individual has read and understands all instructions in this manual.**

## SAFETY MESSAGE ALERT SYMBOLS

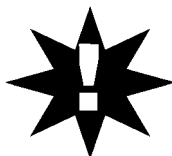
The three (3) Safety Messages shown below will inform you about potential hazards that could injure you or others. The Safety Messages specifically address the level of exposure to the operator, and are preceded by one of three words: **DANGER**, **WARNING**, or **CAUTION**.



**DANGER:** You **WILL** be **KILLED** or **SERIOUSLY** injured if you do not follow directions.



**WARNING:** You **CAN** be **KILLED** or **SERIOUSLY** injured if you do not follow directions.



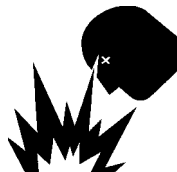
**CAUTION:** You **CAN** be injured if you do not follow directions.

Potential hazards associated with this vibration roller operation will be referenced with Hazard Symbols which appear throughout this manual, and will be referenced in conjunction with Safety Message Alert Symbols.

## HAZARD SYMBOLS



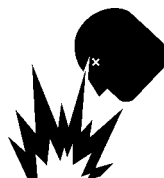
### Lethal Exhaust Gases



Engine exhaust gases contain poisonous carbon monoxide. This gas is colorless and odorless, and can cause death if inhaled. **NEVER** operate this equipment in a confined area or enclosed structure that does not provide ample free flow air.



### Explosive Fuel



**GASOLINE** is extremely flammable, and its vapors can cause an explosion if ignited. **DO NOT** start the engine near spilled fuel or combustible fluids. **DO NOT** fill the fuel tank while the engine is running or hot. **DO NOT** overfill tank, since spilled fuel could ignite if it comes into contact with hot engine parts or sparks from the ignition system. Store fuel in approved containers, in well-ventilated areas and away from sparks and flames. **NEVER** use fuel as a cleaning agent.



### Burn Hazards



Engine components can generate extreme heat. To prevent burns, **DO NOT** touch these areas while the engine is running or immediately after operations. Never operate the engine with heat shields or heat guards removed.



### Rotating Parts



**NEVER** operate equipment with covers, or guards removed. Keep fingers, hands, hair and clothing away from all moving parts to prevent injury.

# MRH-800DS — SAFETY MESSAGE ALERT SYMBOLS

## Accidental Starting



OFF

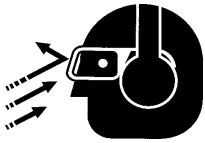
**ALWAYS** place the engine ON/OFF switch in the **OFF** position, when the vibration roller is not in use.

## Respiratory Hazard



**ALWAYS** wear approved respiratory protection.

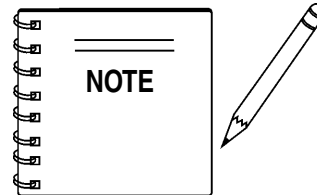
## Sight and Hearing hazard



**ALWAYS** wear approved eye and hearing protection.

## Equipment Damage Messages

Other important messages are provided throughout this manual to help prevent damage to your vibration roller, other property, or the surrounding environment.



This vibration roller, other property, or the surrounding environment could be damaged if you do not follow instructions.

# MRH-800DS — RULES FOR SAFE OPERATION

## CAUTION:



Failure to follow instructions in this manual may lead to serious injury or even death! This equipment is to be operated by trained and qualified personnel only! This equipment is for industrial use only.

The following safety guidelines should always be used when operating the MIKASA MRH-800DS Vibration Roller:

### GENERAL SAFETY

- **DO NOT** operate or service this equipment before reading this entire manual.



- This equipment should not be operated by persons under 18 years of age.



- **NEVER** operate this equipment without proper protective clothing, shatterproof glasses, steel-toed boots and other protective devices required by the job. **ALWAYS** wear slip resistant safety shoes or boots.



- **NEVER** operate this equipment when not feeling well due to fatigue, illness or taking medicine.



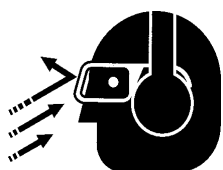
- **NEVER** operate this equipment under the influence of drugs or alcohol.

- **NEVER** use accessories or attachments, which are not recommended by Multiquip for this equipment. Damage to the equipment and/or injury to user may result.

- Manufacturer does not assume responsibility for any accident due to equipment modifications.

- Whenever necessary, replace nameplate, operation and safety decals when they become difficult read.

- **ALWAYS** wear proper respiratory (mask), hearing and eye protection equipment when operating the vibration roller.

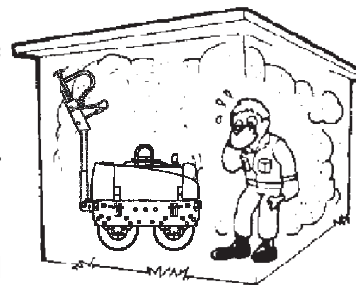


- **NEVER** touch the hot exhaust manifold, muffler or cylinder. Allow these parts to cool before servicing engine or vibration roller.



- **High Temperatures** – Allow the engine to cool before adding fuel or performing service and maintenance functions. Contact with *hot* components can cause serious burns.

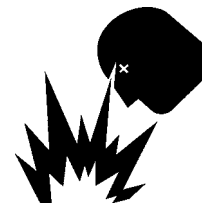
- The engine of this vibration roller requires an adequate free flow of cooling air. **NEVER** operate the vibration roller in any enclosed or narrow area where free flow of the air is restricted. If the air flow is restricted it will cause serious damage to the vibration roller or engine and may cause injury to people and property. Remember the vibration roller's engine gives off **DEADLY** gases.



- **ALWAYS** refuel in a well-ventilated area, away from sparks and open flames.

- **ALWAYS** use extreme caution when working with **flammable** liquids. When refueling, **stop the engine** and allow it to cool. **DO NOT** smoke around or near the machine. Fire or explosion could result from fuel vapors, or if fuel is spilled on a hot engine.

- **NEVER** operate the vibration roller in an explosive atmosphere or near combustible materials. An explosion or fire could result causing severe *bodily harm or even death*.



- Topping-off to filler port is dangerous, as it tends to spill fuel.

- **ALWAYS** store the vibration roller in a clean, dry location out of the reach of children.

- **NEVER** run engine without air cleaner. Severe engine damage may occur.

- **NEVER** leave the vibration roller unattended, turn off engine.

- **CAUTION** must always be observed while servicing this vibration roller. Rotating parts can cause injury if contacted.

- **DO NOT** leave vibration roller with engine running. Use chock blocks if parking vibration roller on a grade.



# MRH-800DS — RULES FOR SAFE OPERATION

- **ALWAYS** use extreme care when operating near obstructions, on slippery surfaces, grades and side slopes.
- When reversing, particularly on the edges and banks of ditches, as well as in front of obstacles, the operator must stay in a standing position at a safe distance from the machine.
- When operating near any house/building or pipelines, always check the effect of machine vibration. Stop the work if necessary.
- Unauthorized equipment modifications will void all warranties.
- Refer to the *Engine Owner's Manual* for engine technical questions or information.
- **DO NOT** operate the vibration roller with the front or rear cover open.
- Replace any worn or damaged vibration roller components immediately.
- **ALWAYS** turn the engine **OFF** before performing maintenance.
- **ALWAYS** make sure vibration roller is correctly secured to the trailer. Check all supports attaching the vibration roller to the trailer and make sure they are tight.
- **ALWAYS** keep the machine away from workers and obstacles. Also keep the immediate area free of bystanders.
- **ALWAYS** check the machine for loosened threads or bolts before starting.
- **ALWAYS** read, understand, and follow procedures in Operator's Manual before attempting to operate equipment.
- **ALWAYS** be sure the operator is familiar with proper safety precautions and operations techniques before using vibration roller.
- A copy of this manual shall accompany the vibration roller at all times.
- **DO NOT** use worn out hoses or couplings; inspect daily.

■ **High Temperatures** – Always stop engine and allow the engine to cool before adding fuel, oil or performing service and maintenance functions. Contact with *hot* components can cause serious burns.

■ **NEVER** disconnect any "**emergency or safety devices**". These devices are intended for operator safety. Disconnection of these devices can cause severe injury, bodily harm or even death! Disconnection of any of these devices will void all warranties.

## Emergencies

■ **ALWAYS** know the location of the nearest **fire extinguisher** and **first aid kit**. Know the location of the nearest telephone. Also know the phone numbers of the nearest **ambulance**, **doctor** and **fire department**. This information will be invaluable in case of an emergency.

## Maintenance Safety

- **NEVER** lubricate components or attempt service on a running machine.
- **ALWAYS** allow the machine a proper amount of time to cool before servicing.
- Keep the machinery in proper running condition.
- Fix damage to the machine immediately and always replace broken parts.
- Dispose of hazardous waste properly. Examples of potentially hazardous waste are used motor oil, fuel and fuel filters.
- **DO NOT** use food or plastic containers to dispose of hazardous waste.
- **DO NOT** pour waste, oil or fuel directly onto the ground, down a drain or into any water source.

## Lifting

- The vibration roller has an operating weight of approximately 1562 lbs. (709 kg). Use lifting equipment capable of lifting this weight.
- Make sure the engine is off before lifting the machine.
- Use reliable cable in lifting the machine.
- Lift upright with sufficient bearing capacity to prevent machine from tilting or slipping.
- When lifting, keep the machine away from workers and animals.

# MRH-800DS — OPERATION AND SAFETY DECALS

Figure 1 displays the operation and safety decals as they appear on the vibration roller. Should any of these decals become damaged or unreadable, contact the Multiquip Parts Department for a replacement set.

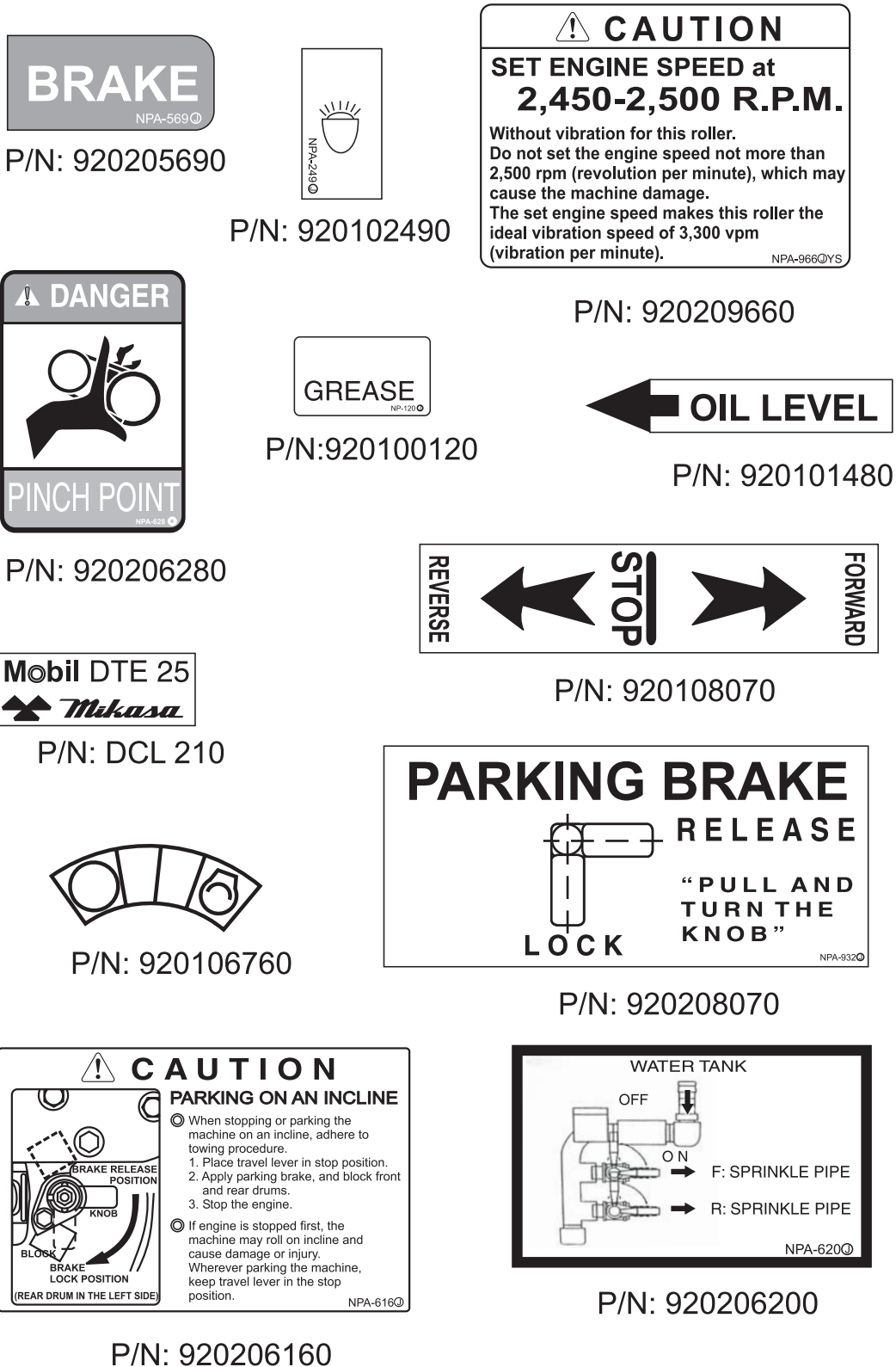


Figure 1. Operation and Safety Decals

# MRH-800DS — OPERATION AND SAFETY DECALS



P/N: 920203330



P/N: 920201910

# Mikasa

P/N: 920101510

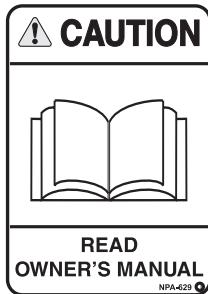
# MRH800DS

P/N: 920207620

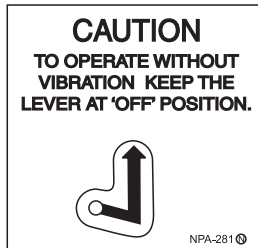


P/N: 920200320

IN COLD SEASON FOR HOUSING, DRAIN FROM WATER TANK AND HOSES TO PREVENT FREEZING

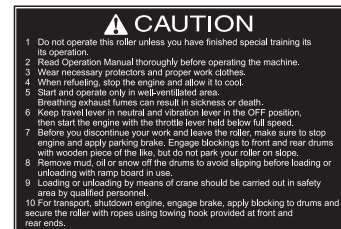


P/N: 920206290



P/N: 920202810

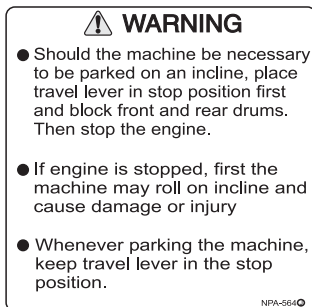
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P/N: 920202870



P/N: 920200470



P/N: NPA-564



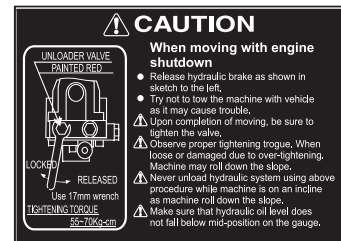
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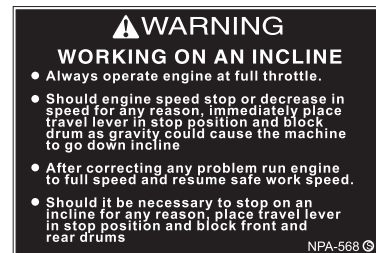
P/N: 920105170



P/N: 920202920



P/N: 920202860



P/N: 920205680

Figure 1. Operation and Safety Decals (Continued)

# MRH-800DS — ROLLER SPECIFICATIONS

**TABLE 1. MRH-800GS VIBRATION ROLLER SPECIFICATIONS**

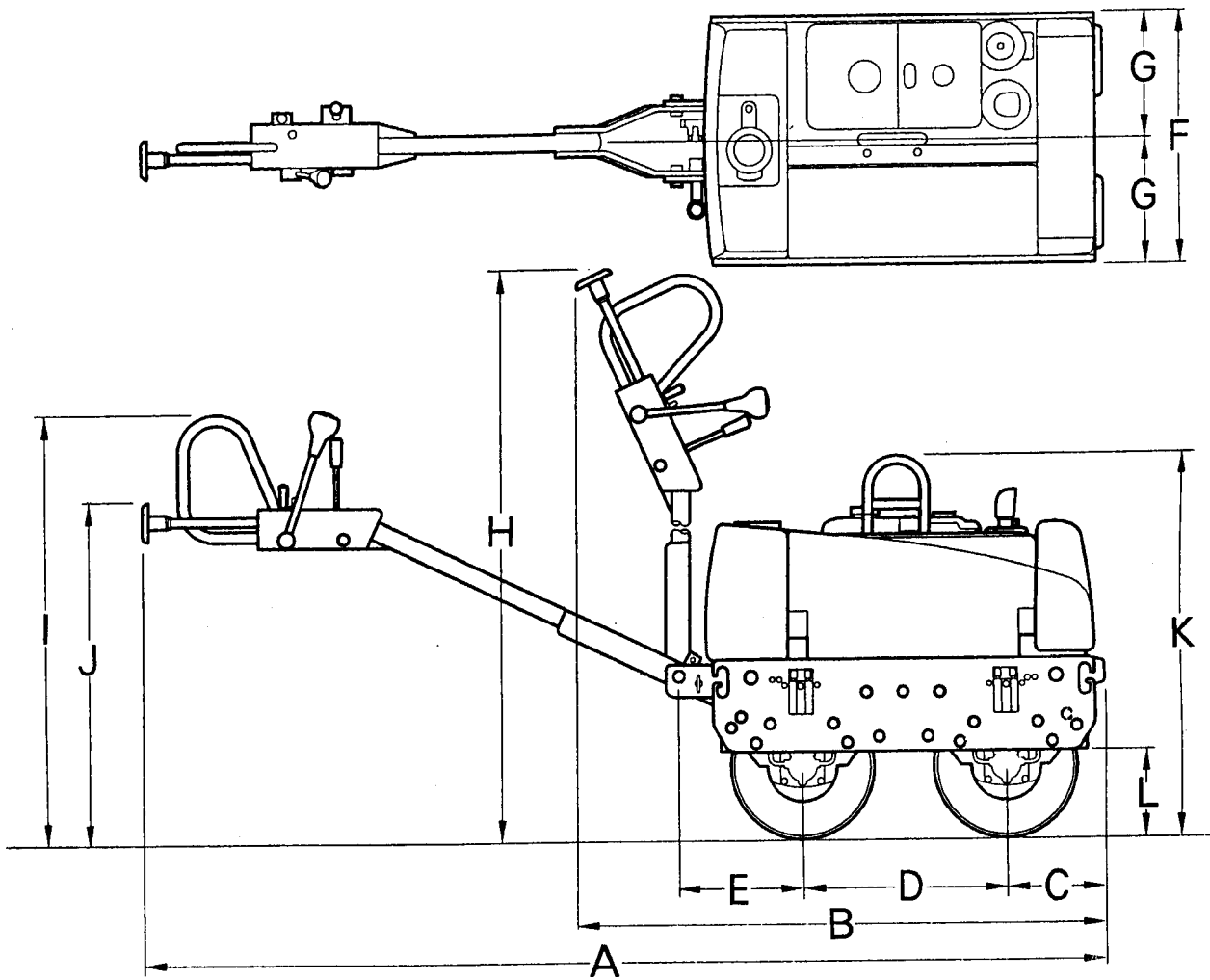
|                               |   |
|-------------------------------|---|
| Dimensions                    | 105 x 27.2 x 41.7 in (2670 x 692 x 1060 mm) |
| Drum Diameter                 | 16 in. (406 mm)                             |
| Drum Width                    | 25.6 in. (650 mm)                           |
| Curb Clearance                | 9.6 in. (243 mm)                            |
| Side Overhang                 | .83 in.(21 mm)                              |
| Operating Weight (with water) | 1562 lbs. (710 kg)                          |
| Vibration Frequency           | 3,300 vpm                                   |
| Centrifugal Force             | 23.5/2,400 kn/kgf                           |
| Drive System                  | Hydraulic Motor                             |
| Vibration System              | Frame                                       |
| Vibration Method              | Belt Drive                                  |
| Vibrator Shaft                | Twin  |
| Gradeability                  | 20 degrees                                  |
| Working Speed                 | 0 - 3 mph (0 - 4.8 kph)                     |
| Fuel Tank Capacity            | 1.88 gallons (7.1 liters)                   |
| Lubricating Oil               | 6.6 gallons (25 liters)                     |
| Water Tank Capacity           | 10.57 gallons (40 liters)                   |
| Engine Model                  | YANMAR Model L100EE-DEVMK1                  |
| Starting System               | Electric/Recoil Start                       |

## MRH-800DS — ENGINE SPECIFICATIONS

**Table 2. ENGINE SPECIFICATIONS (YANMAR)**

|                        |  |
|------------------------|--|
| Engine Model           | YANMAR L100EE-DEV MK1                      |
| Engine Type            | Air-cooled Diesel                          |
| Cylinder Bore X Stroke | 3.46 x 2.75 in (88 x 70 mm)                |
| Displacement           | 13.7 fl oz (406 cc)                        |
| Maximum Output         | 10 HP                                      |
| Fuel Tank Capacity     | 5.8 quarts (5.5 liters)                    |
| Oil Capacity           | 1.74 quarts (1.65 liters)                  |
| Dry Net Weight         | 116.6 lbs. (53 kg)                         |
| Dimensions (L x W x H) | 16.4 x 18.5 x 19.4 in (417 x 470 x 494 mm) |

# MRH-800DS—VIBRATION ROLLER DIMENSIONS



| TABLE 3. DIMENSIONS |   |          |          |
|---------------------|---|----------|----------|
| LENGTH              | A | 105 in.  | 2670 mm. |
|                     | B | 57 in.   | 1445 mm. |
|                     | C | 10 in.   | 255 mm.  |
|                     | D | 22.8 in. | 580 mm.  |
|                     | E | 13.8 in. | 350 mm.  |
| WIDTH               | F | 27.2 in. | 692 mm.  |
|                     | G | 13.6 in. | 346 mm.  |
| HEIGHT              | H | 78.3 in. | 1990 mm. |
|                     | I | 46.5 in. | 1180 mm. |
|                     | J | 37.4 in. | 950 mm.  |
|                     | K | 41.7 in. | 1060 mm. |
|                     | L | 9.6 in.  | 245 mm.  |

Figure 2. MRH-800DS Vibration Roller Dimensions

The Mikasa Model MRH-800DS is a powerful compacting tool capable of applying a tremendous force in consecutive impacts to a soil surface. Its applications include soil compacting for backfilling for gas pipelines, water pipelines and cable installation work.

The impact force of the MRH-800DS levels and uniformly compacts voids between soil particles to increase dry density.

Features include:

- Hydraulic transmission to allow speed change without gear shifting.
- Deadman device which when pressed or hit will cause the travel lever to return to neutral position bringing the machine to a stop.
- A horn to warn of machine's approach.
- Non-corrosive water tank for the sprinkler system with a capacity of more than 10 gallons.
- Lifting hook to transport machine.
- Front bumper and working light.
- Narrow profile with less than one inch wall clearance. Narrower width allows access to tighter areas. No exposed hydraulic hoses.
- Oil bath lubricated bearings and external vibration for less servicing and more dependability.
- Front and rear drum scrapers.
- Drum sprinkler system controls located near the operator.
- Easy access to hydraulic components and hydraulic filter.

# MRH-800DS—VIBRATION ROLLER COMPONENTS

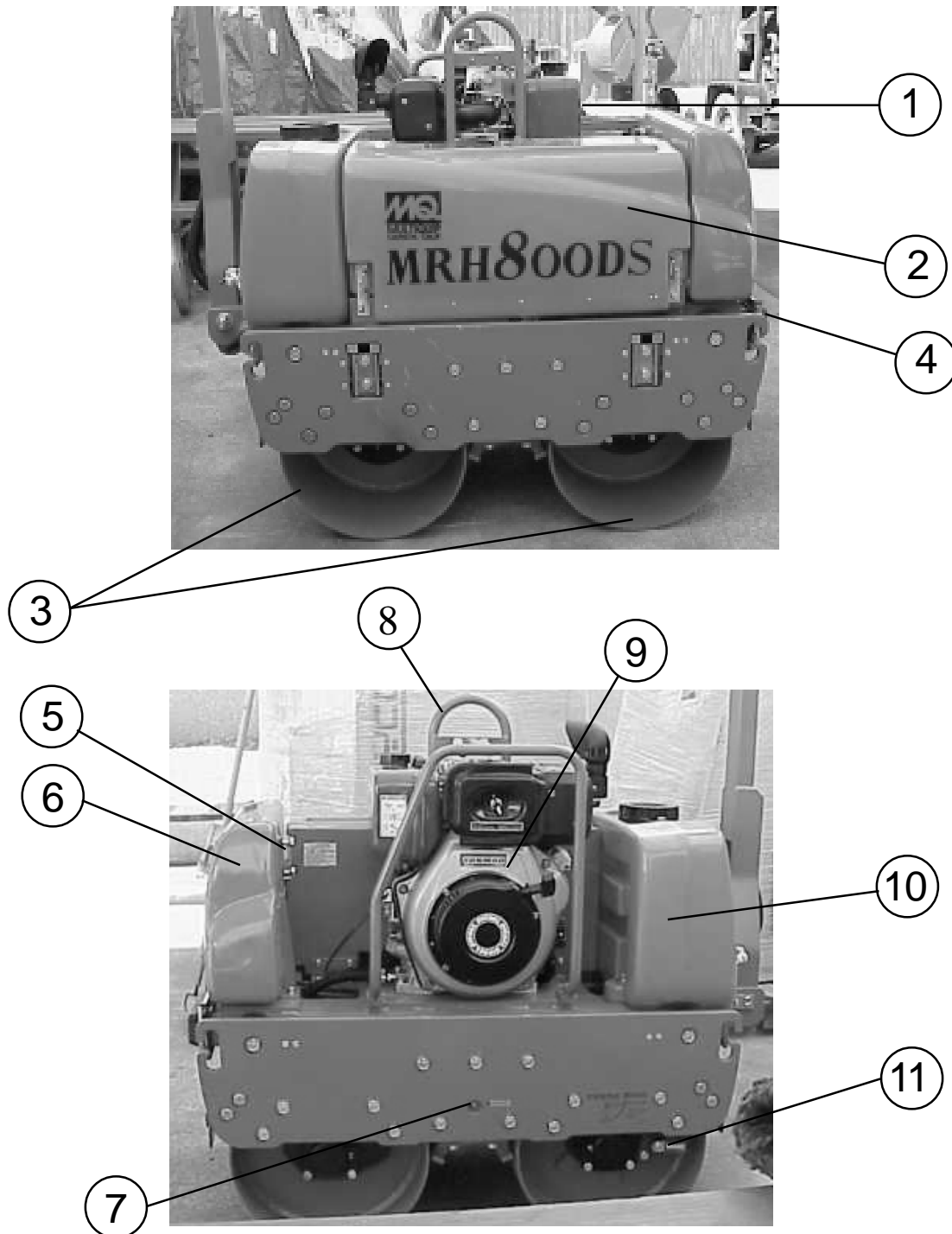


Figure 3. MRH-800DS Vibration Roller Components



## MRH-800DS— VIBRATION ROLLER COMPONENTS

Figure 3 illustrates the location of the major components for the MRH-800DS Vibration Roller. The function of each component is described below:

1. **Fuel Tank/Cap** – Fill with diesel fuel. Fuel tank holds approximately 2 gallons (7.5 liters). **DO NOT** top off fuel. Wipe up any spilled fuel immediately.
2. **Center Cover** – When opened and supported by strut, provides access to oil pump and filter, battery, V-belt, and clutch box.
3. **Vibration Rollers** – 25-inch wide steel drums that provide compaction force in the compaction and patching of asphalt type surfaces.
4. **Front Headlights** – Activate using switch on control handle. Use to illuminate ground during nighttime or low light operating conditions.
5. **Hydraulic Oil Gauge** – Indicates the hydraulic oil level.
6. **Oil Tank** – Fill with proper grade of hydraulic oil.
7. **Vibrator Oil Level Plug** – Remove to check vibrator oil level.
8. **Lifting Hook** – Used to lift the machine with crane or other lifting device.
9. **Engine** – This machine uses the Yanmar L100A engine. Refer to the engine Owner's Manual for more information.
10. **Water Tank** – Holds 10.57 gallons (40 liters) for the sprinkler system.
11. **Parking Brake** – Makes sure machine will not accidentally move when parked or not in use.

# MRH-800DS— HANDLE BAR/LEVER COMPONENTS



Figure 4. MRH-800DS Lever Components

## HANDLE BAR/LEVER COMPONENTS

Figure 4 illustrates the location of the major lever components on the handle bar of the machine. Each component is described below:

1. **Travel Lever** – Controls the direction of travel of the machine (forward and reverse).
2. **Horn Button** – When pressed, gives a warning sound of the machine approaching.
3. **Vibration Lever** – Turns vibration on and off.
4. **Throttle Lever** – Controls the start up of the machine.
5. **Dead-Man Device** – When pressed or hit while traveling in reverse, causes the travel lever to return to neutral position to stop the machine.
6. **Light ON/OFF Switch** - Turns headlight on and off.
7. **Starter Switch** - Engine starts when key is turned to the **RUN** position

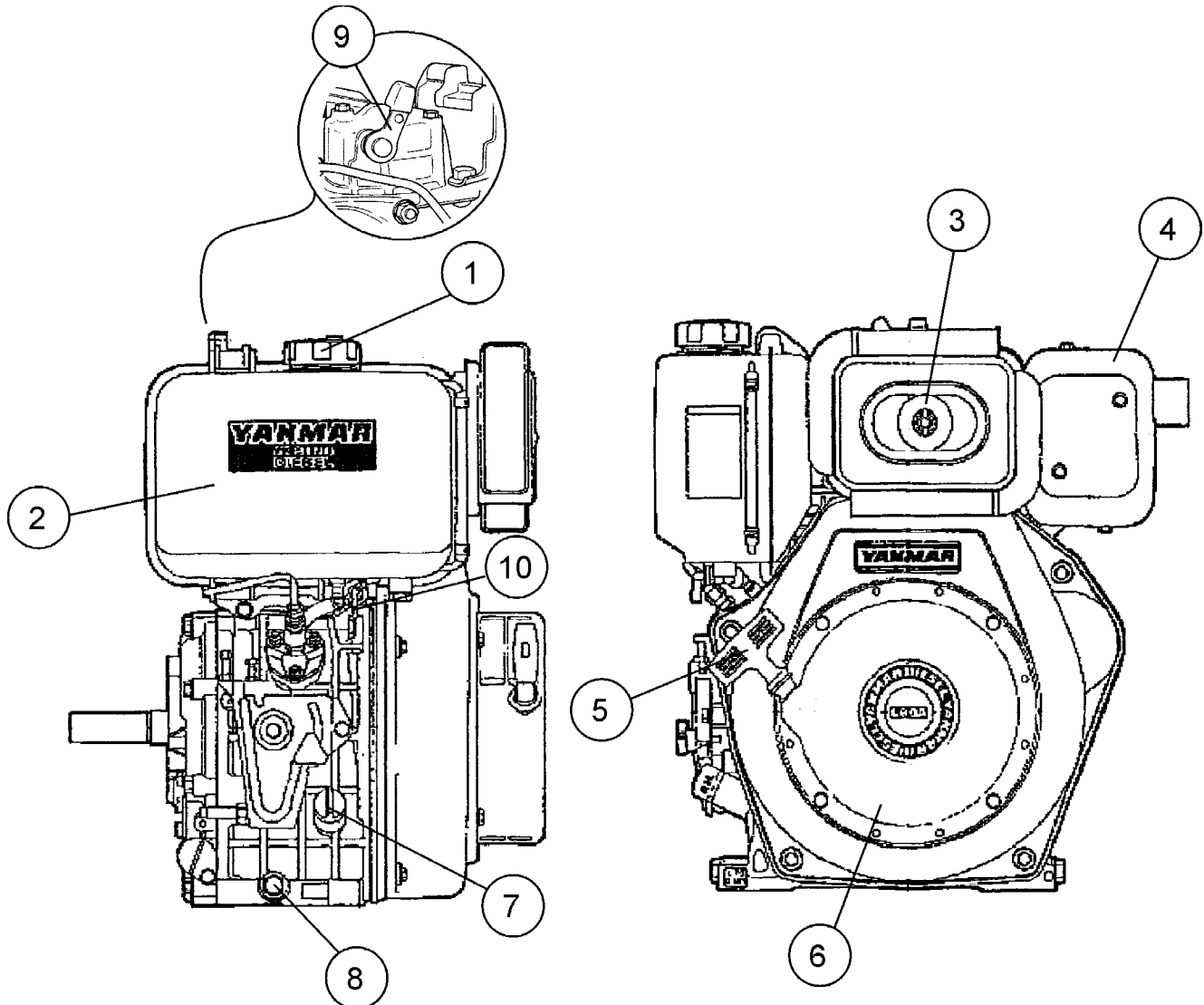


Figure 5. MVH-402DSB Engine Components

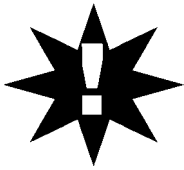
## ENGINE COMPONENTS

Figure 5 illustrates the location of the major engine components of the machine. Each component is described below:

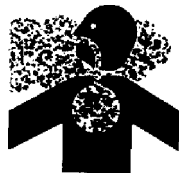
1. **Fuel Filler Cap** – Remove this cap to add unleaded gasoline to the fuel tank. Make sure cap is tighten securely. **DO NOT** over fill.
2. **Fuel Tank** – Diesel engine holds 5.8 quarts of diesel fuel.
3. **Air Cleaner** – Prevents dirt and other debris from entering the fuel system. Remove wing-nut on top of air filter canister to gain access to filter element.
4. **Muffler** – Used to reduce noise and emissions.
5. **Recoil Starter (pull rope)** – Type of engine starting method. Alternate type would be electric start (ignition key).
6. **Recoil Starter** – Housing for pull rope and starter.
7. **Oil Filler Cap/Dipstick** – Remove this cap to add oil to the oil tank. Use dipstick to check oil level.
8. **Oil Drain Plug** – Unscrew plug to drain oil from engine crankcase. Dispose of oil in a safe manner.
9. **Decompression Lever** – Press down before starting engine. To prevent damage to the engine, **DO NOT** use for any other purpose.
10. **Fuel Cock** – Controls the flow of diesel fuel to the engine. Must be in the **ON** position when starting and running the engine.



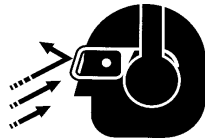
## DANGER



**NEVER** operate the compactor in a confined area or enclosed area structure that does not provide ample **free flow of air**.



**ALWAYS** wear approved eye and hearing protection before operating the compactor.



### Before Starting

1. Read safety instructions at the beginning of manual.
2. Remove dirt and dust, particularly in the engine cooling air inlet, carburetor and air cleaner.
3. Check the air filter for dirt and dust. If air filter is dirty, replace air filter with a new one as required.
4. Check carburetor for external dirt and dust. Clean with dry compressed air.
5. Check fastening nuts and bolts for tightness.
6. Understand the geographical features and regulations of the job site.



### Engine Oil Check

1. To check the engine oil level, place the compactor on secure level ground with the engine stopped.
2. Remove the filler dipstick from the engine oil filler hole (Figure 6) and wipe clean.

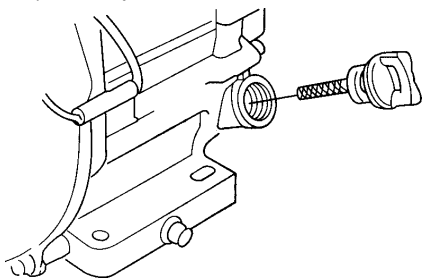


Figure 6. Engine Oil Level

TABLE 4. OIL TYPE

| Season      | Temperature    | Oil Type      |
|-------------|----------------|---------------|
| Summer      | 25°C or Higher | SAE 10W-30    |
| Spring/Fall | 25°C~10°C      | SAE 10W-30/20 |
| Winter      | 0°C or Lower   | SAE 10W-10    |

3. Insert and remove the dipstick without screwing it into the filler neck. Check the oil level shown on the dipstick.
4. If the oil level is low, fill to the edge of the oil filler hole with the recommended oil type (Table 3). Maximum oil capacity is 1.16 quarts (1.1 liters).

### Checking The Hydraulic System

1. Check the oil tank level gauge (Figure 7). Oil level should be at the middle indication of the gauge or higher. Fill as required
2. Check the surroundings of the oil tank, hydraulic pump and motor for oil leakage.

Level should be middle of gauge or higher

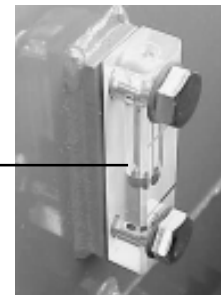


Figure 7. Hydraulic System Oil Level Gauge

## DANGER



**ALWAYS** keep hands and fingers away from pinch points. **DO NOT** allow anyone to reach in on dangerous sections of the machine to avoid any accidents.

### Checking The V-Belt

1. Remove the 2 bolts, one on each side of the center cover, with a #13 socket wrench. Open the center cover of the machine and support it with the strut by inserting its end to the hole in the base (Figure 8).
2. Check V-belt for proper tension. Insufficient tension causes weak vibration.

Center Cover  
Strut  
V-Belt

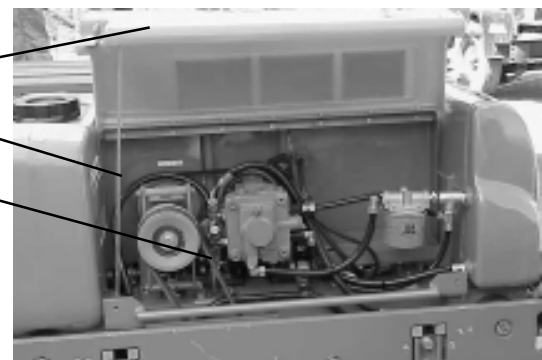


Figure 8. Checking V-Belt Tension

## Checking The Vibrator Oil Level

1. Check vibrator casing for any oil leakage.
2. If any leakage is noticed, remove the level plug on the side of the plate (Figure 9).
3. Check the oil level.

Vibrator Oil Level Plug

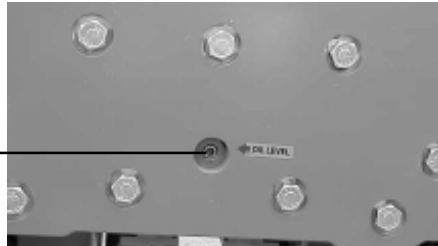


Figure 9. Checking Vibrator Oil Level

## Fuel Check

1. Remove the fuel cap located on top of the engine fuel tank.
2. Visually inspect to see if the fuel level is low. If fuel is low, replenish with unleaded gasoline using a strainer for filtration. **DO NOT** top-off fuel. Wipe up any spilled fuel *immediately!*

## DANGER



Motor fuels are highly flammable and can be dangerous if mishandled. **DO NOT** smoke while refueling. **DO NOT** attempt to refuel the pump if the engine is *hot!* or *running*.



## Checking Water Tank

1. Check the water tank to see if filled. Add water if necessary. The water tank has a capacity of approximately 10 gallons (40 liters) (Figure 10).

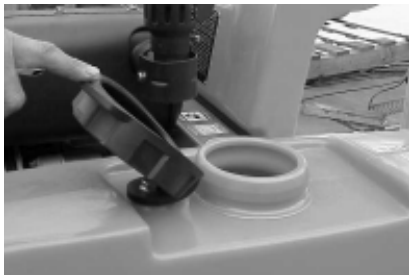
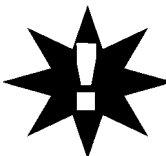


Figure 10. Checking Water Tank

## CAUTION :



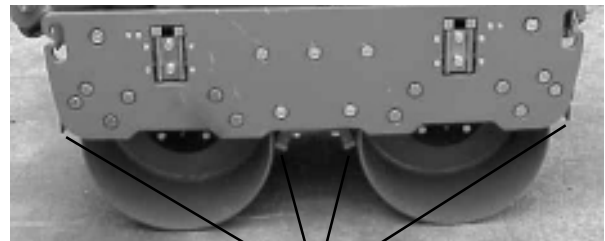
Be careful not to confuse the water tank with the oil tank.

## Checking Levers and Horn

1. Check travel, vibration, and throttle levers to make sure they are functioning properly (Figure 4).
2. With travel lever placed in reverse, push the deadman device and verify that the travel lever returns to neutral position. The travel lever stays in neutral position once the deadman device is released.
3. Press the horn and verify that it functions properly.

## Checking Scrapers

1. Check scrapers and make sure that they are not clogged with mud, bent or damaged (Figure 11).
2. Adjust clearance between drums and scrapers as necessary.



Scrapers

Figure 11. Checking Scrapers

## Checking Bolts, Nuts and Screws

1. Check bolts, nuts, and screws on various parts of the machine, including the engine, for proper tightness.

## Positioning the Handle Bar

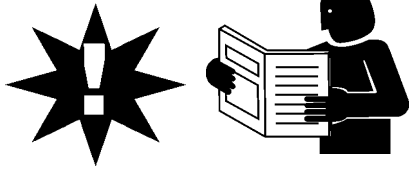
1. Release the handle bar release pin (Figure 12) and position the handle bar to the lowered position before starting operation.
2. When machine is not in use, release the handle bar release pin and position the handle bar to the upright position.



Handle Bar Release Pin

Figure 12. Positioning the Handle Bar

## CAUTION :



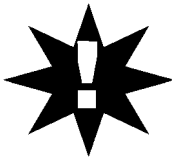
**DO NOT** attempt to operate the roller until the Safety, General Information and Inspection sections of this manual have been **read and thoroughly understood**.

This section is intended to assist the operator with the **initial start-up** of the roller. It is extremely important that this section be read carefully before attempting to use the compactor in the field.

## STARTING THE ENGINE

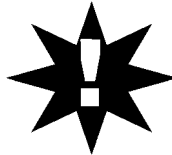
The engine can be started by motor (electric) or manually (recoil). Refer to Figures 3 and 4 for the location of controls and components.

## CAUTION :



Make sure to follow all safety rules referenced in the safety section of this manual before operating roller. Keep work area clear of debris and other objects that could cause damage to the roller or bodily injury.

## CAUTION :



When the engine is running, **NEVER** turn the starter key to the **START** position

## Electric Start

1. On the control handle:
  - A. Move the *throttle lever* to the **RUN** position.
  - B. Move the *travel lever* to the **NEUTRAL** position.
  - C. Move the *vibration lever* to the **OFF** position.
4. Open the fuel cock by turning it clockwise to the down position (Figure 13).



Fuel Cock  
(Open  
Position)

Figure 13. Open Fuel Cock

5. Insert the starter key into the key switch and turn it to the **RUN** position (Figure 14). The buzzer should sound at this time.

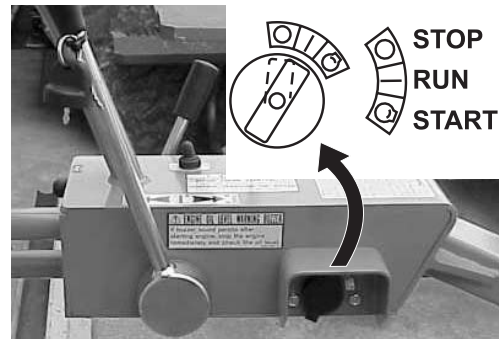


Figure 14. Starter Key (Run Position)

6. Turn the starter key further to the right to the **START** position to start the engine. Buzzer stops sounding when the engine speed increases. With safety switch equipped, motor runs only when the travel lever is in the neutral position.

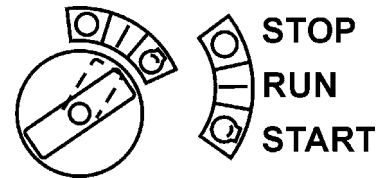


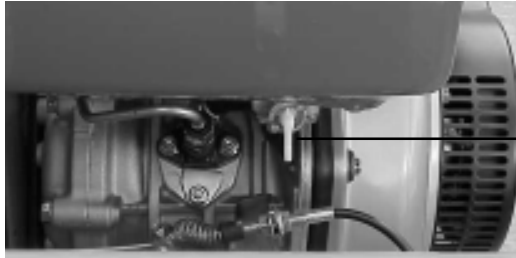
Figure 15. Starter Key (Start Position)

7. If the engine fails to start, **DO NOT** continue to rotate the starter key for more than 5 seconds. Return the key to the **RUN** position and wait 20 to 30 seconds before starting again.
8. After starting the engine, continue to warm up the engine for about 3 to 10 seconds especially in cold weather.
9. If the buzzer does not stop sounding after the engine has started, shutdown engine immediately and check engine oil level. The buzzer functions as engine oil level warning also.



## Recoil Start

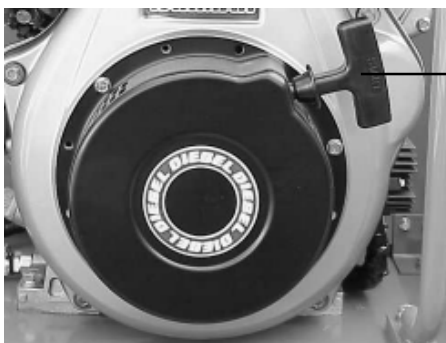
1. Move the throttle lever to the **RUN** position.
2. Open the fuel cock by turning it clockwise to the down position (Figure 16).



Fuel Cock  
(Open  
Position)

Figure 16. Open Fuel Cock

3. Pull the starting handle slowly until you feel some resistance (Figure 17). Return handle to original position.



Pull  
Handle To  
Start

Figure 17. Engine Start Handle

4. Push down the decompression lever (Figure 18).

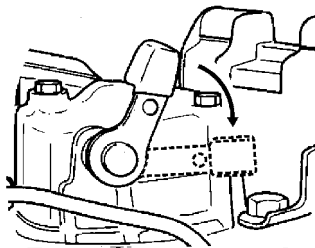


Figure 18. Decompression Lever

5. Pull the starting handle hard and fast to start engine (Figure 19).

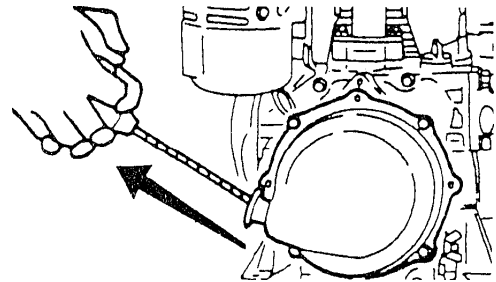
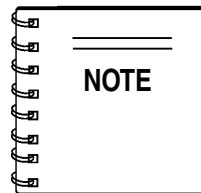


Figure 19. Engine Start Handle

6. If the engine does not start, repeat steps 3 through 5.



When starting with a motor starter, a decompressor is not normally required. However, when ambient temperature or battery charger level is low, use of a decompressor will help make the start-up easier.

## TRAVELING

1. Before starting to travel, make sure to release parking brake located on the left side of the rear roller. If the parking brake lever is tight, moving the roller back and forth will make it easier (Figure 20).

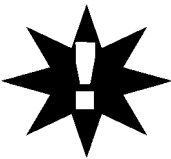


Parking Brake (Released Position)

Figure 20. Parking Brake

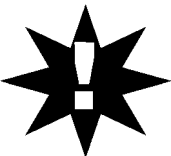
2. With the throttle lever in the **RUN** position, increase the engine rotation.
3. Push the travel lever forward slightly. This will cause the roller to travel forward at slow speed.
4. To increase the travel speed, push the travel lever further.
5. Travel speed can be varied between 0 and 3 km/h (both forward and reverse).
6. Push the travel lever backward to go in the reverse direction.

## CAUTION :



**DO NOT** reduce speed during work. When shifting travel lever from forward to reverse, be sure to stop the lever at the neutral position first before moving the lever to the opposite direction. **DO NOT** shift the lever from forward to reverse (or reverse to forward) in one motion.

## CAUTION :



After test travel, shut down engine and check for any problems including oil leakage. If any trouble is found, correct the problem before attempting to operate the roller again.

## VIBRATING

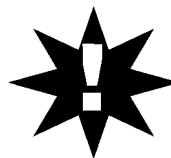
1. Shift the vibration lever **AWAY** from its **OFF** position. The vibration lever will automatically spring forward and the roller will start vibrating (Figure 21).



Off Position of Vibration Lever

Figure 21. Vibration Lever

## CAUTION :



Using vibration with clutch slipping causes the clutch to burn. Also, vibration should **NOT** be used over completely compacted area, paved road surface, or with stationary roller.

## WATERING

1. For watering work, turn the water cocks clockwise, at the rear of the machine, to start sprinkling. (Figure 22).

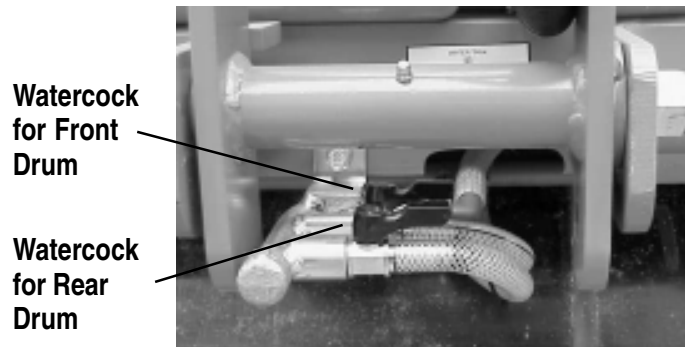


Figure 22. Water Cocks

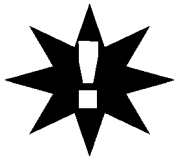
## SAFETY FEATURES

1. A horn is provided to warn of approach.
2. The dead man device prevents accidental traveling in reverse. It automatically makes the travel lever return to neutral position by stopping the machine when an object comes in contact with the dead man device.

## STOPPING

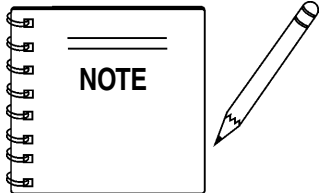
1. With travel lever in the **NEUTRAL** position, and the vibration lever in the **OFF** position, return the throttle lever to the **START** position. Allow the machine to cool down for 3 to 5 minutes.
2. Push the throttle lever forward to stop the engine. In a motor start, return the key switch to the **STOP** position as soon as the engine stops.

## CAUTION :



Neglecting to return the key switch to the **STOP** position will cause the battery to discharge making start up impossible the next time.

3. After the engine stops, close the fuel cock.
4. Lock the parking brake by pulling the brake lever and rotating it 90 degrees clockwise.



Parking brake system should always be kept clean to avoid mud deposits.

## UNLOADING

1. If you need to move the roller by pushing it manually once engine is stopped, loosen bolt of bypass valve on oil pump by one rotation counterclockwise. This will cause the hydraulic break to disengage and allow the roller to be moved more easily (Figure 23).
2. After moving, tighten the bolt again. Tightening torque is 55 to 70 kgf-cm.

Bypass  
Valve  
Bolt

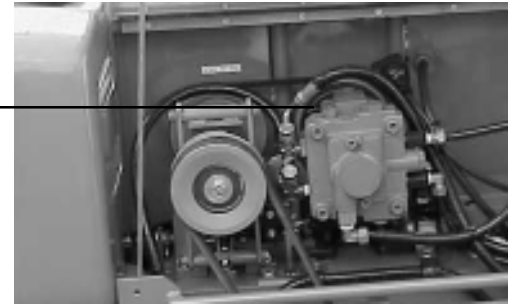
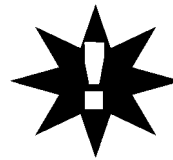


Figure 23. Location of Bypass Valve Bolt

## CAUTION :



**NEVER** tow roller with any type of vehicle. Doing so will damage the hydraulic system.  
**NEVER** perform unloading procedure on a slope. This may cause roller to roll down if parking brake or blocking is deficient.

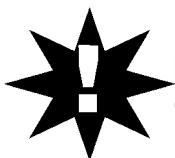
## LIFTING

1. Use a crane or lift to load and unload the machine. A skilled crane operator is required to perform the job.
2. When lifting the machine, check for any damaged or loose bolts, lifting hooks, and shock mounts.
3. Check any damaged or loose bolts in the guard frame to avoid machine sliding off.
4. Make sure that the machine is shut off before machine is lifted.
5. Use reliable cable for lifting.
6. **ALWAYS** lift the machine vertically and keep the machine away from workers and animals.
7. **DO NOT** lift the machine higher than the required height.

## TRANSPORTING

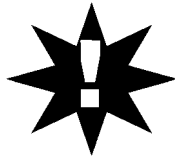
1. Always make sure that the machine is shut off while being transported.
2. Check that the fuel cap is properly closed and tightened.
3. When traveling long distances or on rugged terrain, drain the fuel of the machine before transporting.
4. Tie down the machine securely on the transportation so that it will not move or topple over.

## CAUTION:



Inspection and other services should **ALWAYS** be carried out on hard and level ground with the engine shutdown.

## CAUTION:



Fuel piping and connections should be replaced every 2 years.

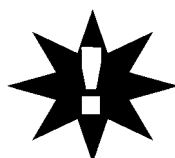
### Inspection and Maintenance Service Tables.

- To make sure your plate compactor is always in good working condition before using, carry out the maintenance inspection in accordance with Tables 5 through 7.

**TABLE 5. MRH-800DS MACHINE INSPECTION**

| ITEM                                | HOURS OF OPERATION                            | REMARKS     |
|-------------------------------------|---|-------------|
| Loose or Missing Screws             | Every 8 hours (every day)                     |             |
| Damaged Parts                       | Every 8 hours (every day)                     |             |
| Function of Controlling System Part | Every 8 hours (every day)                     |             |
| Hydraulic System Leak               | Every 100 hours                               | See page 27 |
| Vibrator Oil Check                  | Every 100 hours                               | See page 27 |
| Vibrator Oil Replacement            | Every 300 hours                               | See page 26 |
| Hydraulic Oil Check                 | Every 100 hours                               | See page 26 |
| Hydraulic Oil Replacement           | First after 200 hours, then every 1,000 hours | See page 27 |
| V-belt (clutch) Check               | Every 200 hours                               | See page 27 |
| Battery Check                       | Every 100 hours                               | See page 28 |

## CAUTION:



These inspection intervals are for operation under normal conditions. Adjust your inspection intervals based on the number of hours the roller is in use, and your particular working conditions.

**TABLE 6. MRH-800DS ENGINE CHECK**

| ITEM  | HOURS OF OPERATION  |
|---|---|
| Oil or Fuel Leak  | Every 8 hours (every day)   |
| Tightness of Fastening Threads                          | Every 8 hours (every day)   |
| Engine Oil Check and Replenishment                      | Every 8 hours (every day)<br>(Replenish to specified maximum level) |
| Engine Oil Replacement                                  | After first 25 hours then every 50 to 100 hours                     |
| Air Filter Cleaning                                     | Every 100 hours   |
| See separate engine manual for details on engine check. |   |

### Daily Service

- Check for leakage of fuel or oil.
- Check for loose screws including tightness. See Table 7 below (tightening torque), for retightening:

**TABLE 7. TIGHTENING TORQUE (in. kg/cm) DIAMETER**

| Material | 6mm | 8mm         | 10mm         | 12mm  | 14mm  | 16mm  | 18mm  | 20mm  |
|----------|-----|-------------|--------------|-------|-------|-------|-------|-------|
| 4T       | 70  | 150         | 300          | 500   | 750   | 1,100 | 1,400 | 2,000 |
| 6-8T     | 100 | 250         | 500          | 800   | 1,300 | 2,000 | 2,700 | 3,800 |
| 11T      | 150 | 400         | 800          | 1,200 | 2,000 | 2,900 | 4,200 | 5,600 |
| *        | 100 | 300~<br>350 | 650 ~<br>700 |       |       |       |       |       |

\* (In case counter-part is of aluminum)  
(Threads in use with this machine are all right handed)  
Material and quality of material is marked on each bolt, and screw.

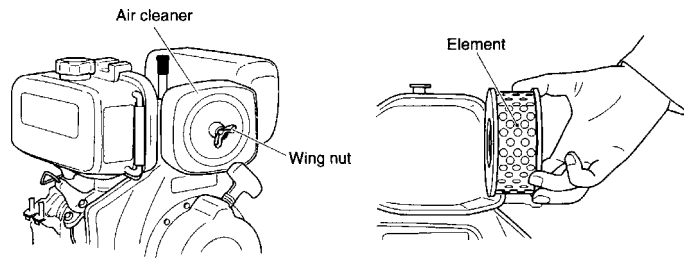
- Remove soil and clean the bottom of compaction plate.
- Check hydraulic pump, piping and hose for any leakage. A loosened hydraulic hose can be a cause for leakage. Check hydraulic hose connections with wrench applied for tightness.
- Check engine oil.

## Engine Oil Replacement:

1. Replace engine oil in the first 25 hours of operation and every 50 to 100 hours afterwards.
2. Oil may be drained more easily when it is warm after operation (For more details, see separate engine Owner's Manual).

## Air Filter

1. The air filter element should be cleaned because a clogged air cleaner can cause poor engine starting, lack of power and shorten engine life substantially.

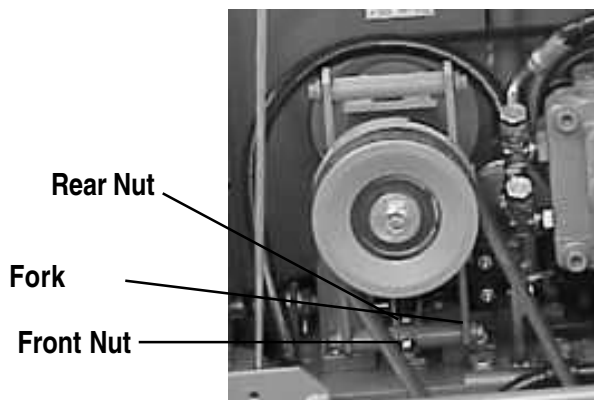


**Figure 24. Engine Air Filter and Element**

2. To clean or replace air filter loosen the wing nut on the air filter housing (Figure 24) remove the cover and take out air filter cartridge. If only cleaning of the air filter is desired blow through the air filter cartridge from the inside, moving a jet of dry compressed air up and down until all dust is removed.

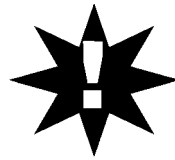
## VIBRATION CLUTCH ADJUSTMENT

1. Move vibration lever to the **OFF** position.
2. Loosen the front and rear nuts at the end of vibration clutch cable (Figure 25).
3. Turn in the nut on the front side again and at the position that release fork starts to move, turn in the nut by one or two threads. Lock it a this position together with the rear nut.

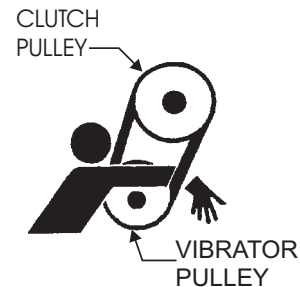


**Figure 25. Vibration Clutch Adjustment**

## CAUTION:

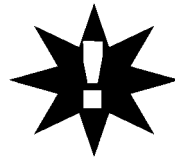


**NEVER** attempt to check the V-belt with the engine running. Severe injury can occur if your hand gets caught between the V-belt and the clutch (Figure 26). Always use safety gloves.



**Figure 26. V-Belt Hazard**

## CAUTION :



Excessive turning of front nut may cause the sliding engagement of clutch to take place or no vibration takes place even when vibration lever is engaged.

On the other hand, insufficient turn may cause sliding engagement of clutch even when the vibration lever is placed in the **OFF** position or for vibration to remain engaged.

## HYDRAULIC SYSTEM INSPECTION AND SERVICE

1. Check motor and pump for any damage.
2. Check hoses and pipes for proper tightness and make sure there are no leaks.
3. Check nylon tubes for hydraulic oil intake and drain. Retighten brass nut if loose and if a leak is detected. If leak continues after retightening, replace nylon tube, nut and sleeve.
4. Check oil tank for proper oil level using the hydraulic system oil level gauge (See Figure 7). Make sure hydraulic oil has not whitened or emulsified. Whitish color means aeration in pump. Retighten pipe and correct level of oil. Emulsification means water in the hydraulic oil. Replace the oil.

## ROLLER INSPECTION AND ADJUSTMENT

1. Refer to Table 8 for oil and grease requirements.
2. Check oil tank level daily.
3. Check the machine for oil leak and proper function of lever, cables, and links daily.

## MACHINE MAINTENANCE

1. At the end of each day's operation, wash down dust and dirt off the machine. Clean area around drums and scrapers making sure all mud is removed.
2. Drain water tank completely.
3. Cover the machine to prevent dust and store in dry place away from sun exposure.

## LONG TERM STORAGE

1. Conduct thorough lubrication and oil change.
2. Disconnect battery terminals and dismount battery from machine. Store battery.
3. If there is a possibility that ambient temperature will drop below freezing point, add antifreeze agent to coolant.
4. Cover the inlet and outlet of air cleaner and muffler securely.
5. Store machine indoors. Do not leave outdoors.

Refer to Table 7 for lubrication necessary for the machine.

## BATTERY MAINTENANCE

### DANGER :



Lead-acid battery contains sulfuric acid, which may damage eyes or skin on contact.



### FOR YOUR SAFETY:

- **ALWAYS** wear a face shield to avoid acid getting into the eyes. If acid gets in contact with eyes, flush immediately with clean water and get medical advice.
- Wear rubber gloves and protective clothes to keep acid off skin. If acid gets in contact with skin, wash off immediately with clean water.
- Use a flashlight to check battery electrolyte level. **ALWAYS** check the engine is stopped.
- **DO NOT** charge battery or jump-start engine when the battery is frozen. Warm the battery to 15 degrees F or battery may explode.
- Replace the battery with the same or similar capacity battery or battery may explode.

- **DO NOT** close the exhaust outlet of battery. The gas pressure building up in the battery may cause explosion.
  - Before using a battery charger, read and understand the charger instruction manual thoroughly.
  - Charge the battery in a non-spark, well-ventilated area. Avoid fire from cigarette sparks or matches.
1. If a battery has not been used for some time, reduce the charge level initially to protect each plate inside the battery.
  2. Check the battery terminals periodically to ensure that they are in good condition.
  3. Use wire brush or sand paper to clean the battery terminals.
  4. Check battery for cracks or any other damage. If white pattern appears inside the battery or paste has accumulated at the bottom, replace the battery.
  5. Measure the specific gravity of electrolyte:
    - completely charged: 1.270 - 1.290
    - needs charging: 1.260 or lower
  6. If the machine will not be in operation for a long period of time, charge the battery sufficiently, tighten all caps, correctly, store in cool dry place and check the battery charge level every month to maintain the performance of the battery.

## BATTERY CABLE CONNECTION

1. When removing cable, disconnect the ground side (normally negative) first (Figure 27).

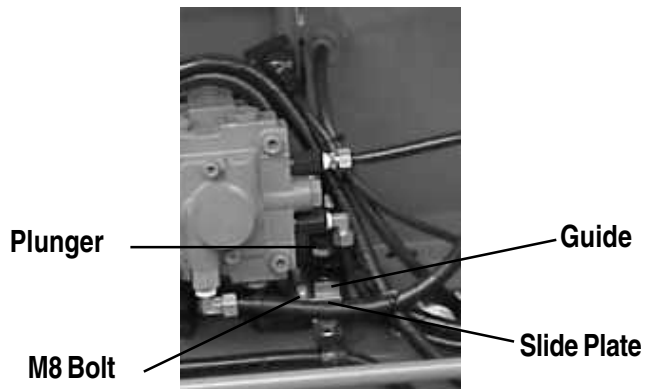


Figure 27. Battery Connection

2. When installing cable connect the ground side (normally negative) last.

## FORWARD AND REVERSE TRAVEL ADJUSTMENT

1. If neutral position for forward and reverse travel has been displaced, conduct the neutral adjustment.
2. If roller travels forward with the ball of ball plunger remaining in V slot of the guide, loosen M8 bolt and slide the slide plate slightly toward the engine. If the roller travels backward, slide the plate towards side plate (Figure 28).



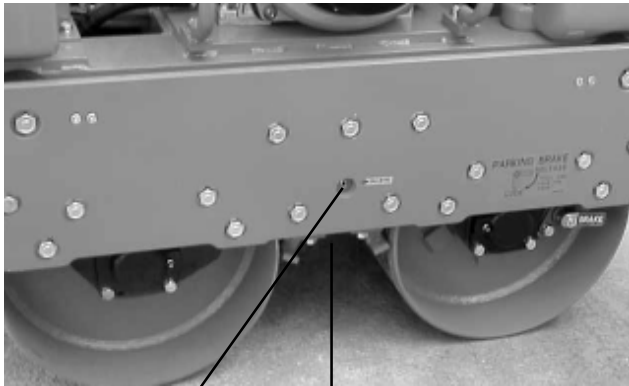
**Figure 28. Adjustment of Neutral Position**

3. With M8 bolt tightened, start engine and check the neutral for forward and reverse. If still displaced, repeat the procedure.
4. If neutral position of forward/reverse lever has been displaced, use the turn buckle located on the oil pump side of forward/reverse cable.

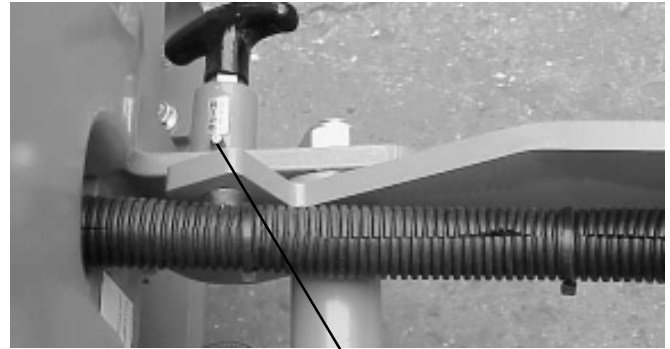
## TABLE 8. MRH-800DS LUBRICATION CHART

| ITEM  | MAINTENANCE NEEDED                   | FREQUENCY  | TYPE  | LOCATION          |
|---|--------------------------------------|--|---|-------------------|
| Vibrator Oil                                  | Replace Oil                          | Every 300 Hours of Operation   | SAE10W30 (1.5 liters)   | see Figure 29     |
| Engine Oil                                    | Replace Oil                          | Initially - After 10 to 20 Hours of Operation<br>Thereafter - Every 50 to 100 Hours of Operation | SAE#30 or SAE10W30 (Spring - Summer)  | see Figure 6      |
|   |                                      |  | SAE#20 or SAE10W30 (Fall - Winter)  |                   |
|   |                                      |  | SAE10W30 (Extremely Cold Region)  |                   |
| Hydraulic Oil                                 | Replace Oil                          | Every 1000 to 1500 Hours of Operation  | Viscosity:<br>ISO VG32 equivalent - for cold region<br>ISO VG46 or 56 equivalent - for warm region<br>Shipped from factory with Shell Tellus 46 (25 liters) | see Figure 7      |
| Travel Lever, Vibration Lever, Throttle Lever | Add Lubrication Oil to Sliding Parts | Every 50 Hours of Operation  | Lubrication Oil   | see Figure 4      |
| Dead Man's Device                             | Lubricate Grease Fitting             | Every 50 Hours of Operation  | Grease  | see Figure 4      |
| Handle Bar Release Pin                        | Lubricate Grease Fitting             | Every 50 Hours of Operation  | Grease  | see Figure 32     |
| Bearing Cover                                 | Lubricate Grease Fitting             | Every 50 Hours of Operation  | Grease  | see Figures 30,31 |
| Clutch Box                                    | Lubricate Grease Fitting             | Every 50 Hours of Operation  | Grease  | see Figure 25     |
| Travel Lever                                  | Lubricate Sliding Parts              | Every 50 Hours of Operation  | Grease  | see Figure 4      |
| Oil Filter                                    | Replace Oil Filter                   | Initially - After 25 Hours of Operation<br>Thereafter - Every 500 Hours of Operation             | Mikasa Genuine 10 micron Filter Paper   | see Figure 26     |

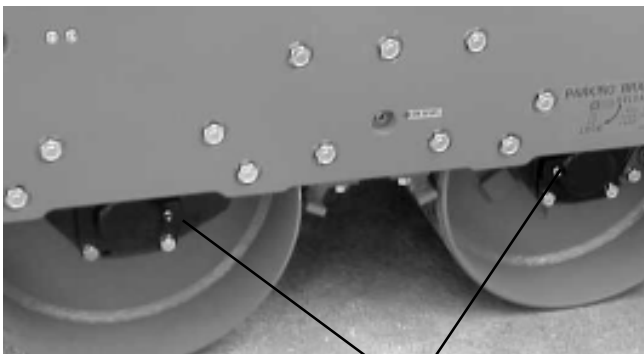




**Vibrator Oil Level Plug**  
**Vibrator Oil Drain Plug**  
**Figure 29. Vibrator Oil Maintenance**



**Handle Bar Release Pin Grease Fitting**  
**Figure 32. Handle Bar Maintenance**



**Figure 30. Bearing Cover Grease Fitting**



**Clutch Box Grease Fitting**  
**Figure 33. Clutch Box Maintenance**



**Bearing Cover Grease Fitting**  
**Figure 31. Bearing Cover Maintenance**



**Hydraulic Oil Filter**  
**Figure 34. Hydraulic Oil Filter Location**



# MRH-800DS—ROLLER TROUBLESHOOTING

**TABLE 9. TROUBLESHOOTING**

| <b>SYMPTOM</b>                                | <b>POSSIBLE PROBLEM</b>                     | <b>SOLUTION</b>  |
|---|---|--|
| Unit does not travel.                         | Parking brake still engaged?                | Release parking brake lever.   |
| Unit does not travel or travel is not smooth. | Defective centrifugal clutch?               | Repair or replace clutch.  |
|   | Damaged rubber coupling and flange?         | Replace rubber coupling and flange.                                    |
|   | Defective travel cable and link?            | Repair or replace travel cable and link.                               |
|   | Damaged scraper or too much mud in scraper? | Replace or repair scraper.   |
|   | Damaged or clogged oil filter?              | Replace filter.  |
|   | Damaged or leaking hydraulic pipe?          | Repair or replace parts.   |
|   | Low oil level or contaminated oil?          | Replenish or replace oil.  |
|   | Damaged or leaking hydraulic pump?          | Repair or replace hydraulic pump.                                      |
|   | Damaged or leaking hydraulic motor?         | Repair or replace hydraulic motor.                                     |
|   | Damaged drum gear and bearing?              | Repair parts.  |
|   | Bad drum rotation?                          | Repair or replace drum.  |
| Unit does not vibrate or has weak vibration.  | Defective centrifugal clutch?               | Repair or replace clutch.  |
|   | Damaged or slipping V-belt?                 | Replace V-belt or adjust tension.                                      |
|   | Damaged vibration cable and linkage?        | Replace or repair vibration cable and linkage.                         |
|   | Damaged vibration clutch?                   | Adjust or replace clutch.  |
|   | Defective clutch vibrator pulley V-belt?    | Replace V-belt.  |
|   | Vibrator does not turn smoothly with hand?  | Check and repair vibrator. Check if oil level is not excessively high. |

# MRH-800DS—ENGINE TROUBLESHOOTING

**TABLE 10. ENGINE TROUBLESHOOTING**

| SYMPTON  | POSSIBLE PROBLEM  | SOLUTION  |
|--|---|---|
| Engine will not start or start is delayed, although engine can be turned over. | Speed control lever is in "STOP" position?                    | Set speed control lever to "START" position.  |
|  | No fuel reaching injection pump?                              | Add fuel. Check entire fuel system.   |
|  | Defective fuel pump?  | Replace fuel pump.  |
|  | Fuel filter clogged?  | Replace fuel filter and clean tank.   |
|  | Faulty fuel supply line?                                      | Replace or repair fuel line.  |
|  | Compression too low?  | Check piston, cylinder and valves. Adjust or repair per engine repair manual.   |
|  | Fuel injector not working correctly?                          | Repair or replace injector in accordance with engine repair manual.   |
|  | Oil pressure too low?   | Check engine oil pressure.  |
|  | Low starting temperature limit exceeded                       | Comply with cold starting instructions and proper oil viscosity.  |
| At low temperatures engine will not start.                                     | Fuel separates has inadequate resistance to low temperatures? | Check whether clear (not turbid) fuel emerges from the fuel line (detach from injection pump). If the fuel is turbid or separated, warm up the engine or drain the complete fuel supply system. Refuel with winter grade diesel fuel. |
|  | Engine oil too thick?   | Refill engine crankcase with correct type of oil for winter environment.  |
| Engine fires but stops soon as starter is switched off.                        | Throttle lever in STOP position?                              | Reposition throttle lever to RUN position.  |
|  | Fuel filter blocked?  | Replace fuel filter.  |
|  | Fuel supply blocked?  | Check the entire fuel system.   |
| Engine stops by itself during normal operation.                                | Fuel tank empty?  | Add fuel.   |
|  | Fuel filter blocked?  | Replace fuel filter.  |

# MRH-800DS— ENGINE TROUBLESHOOTING

**TABLE 10. ENGINE TROUBLESHOOTING (CONTINUED)**

| SYMPTON   | POSSIBLE PROBLEM  | SOLUTION                                 |
|---|---|--|
| Low engine power, output and speed.                         | Fuel tank empty?  | Replace fuel filter.                     |
|   | Fuel filter clogged?                                      | Replace fuel filter.                     |
|   | Fuel tank venting is inadequate?                          | Ensure that tank is adequately vented.   |
|   | Speed control lever does not remain in selected position? | See engine manual for corrective action. |
|   | Engine oil level too full?                                | Correct engine oil level?                |
| Low engine power output and low speed, black exhaust smoke. | Air filter blocked?                                       | Clean or replace air filter.             |
|   | Incorrect valve clearances?                               | Adjust valves per engine specification.  |
|   | Malfunction at injector?                                  | See engine manual.                       |

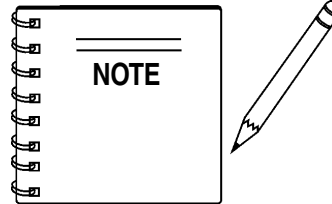
# EXPLANATION OF CODE IN REMARKS COLUMN

How to read the marks and remarks used in this parts book.

## Section 1: Items Found In the “Remarks” Column

Serial Numbers-Where indicated, this indicates a serial number range (inclusive) where a particular part is used.

Model Number-Where indicated, this shows that the corresponding part is utilized only with this specific model number or model number variant.



If more than one of the same reference number is listed, the last one listed indicates newest (or latest) part available.

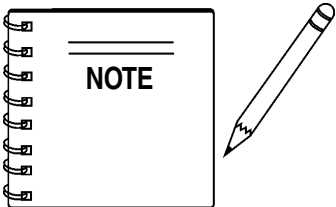
## Section 2: Items Found In the “Remarks” Column

Serial Numbers-Where indicated, this indicates a serial number range (inclusive) where a particular part is used.

Model Number-Where indicated, this shows that the corresponding part is utilized only with this specific model number or model number variant.

## Section 3: Items Found In the “Items Number” Column

All parts with same symbol in the number column, \*, #, +, %, or ■, belong to the same assembly or kit.



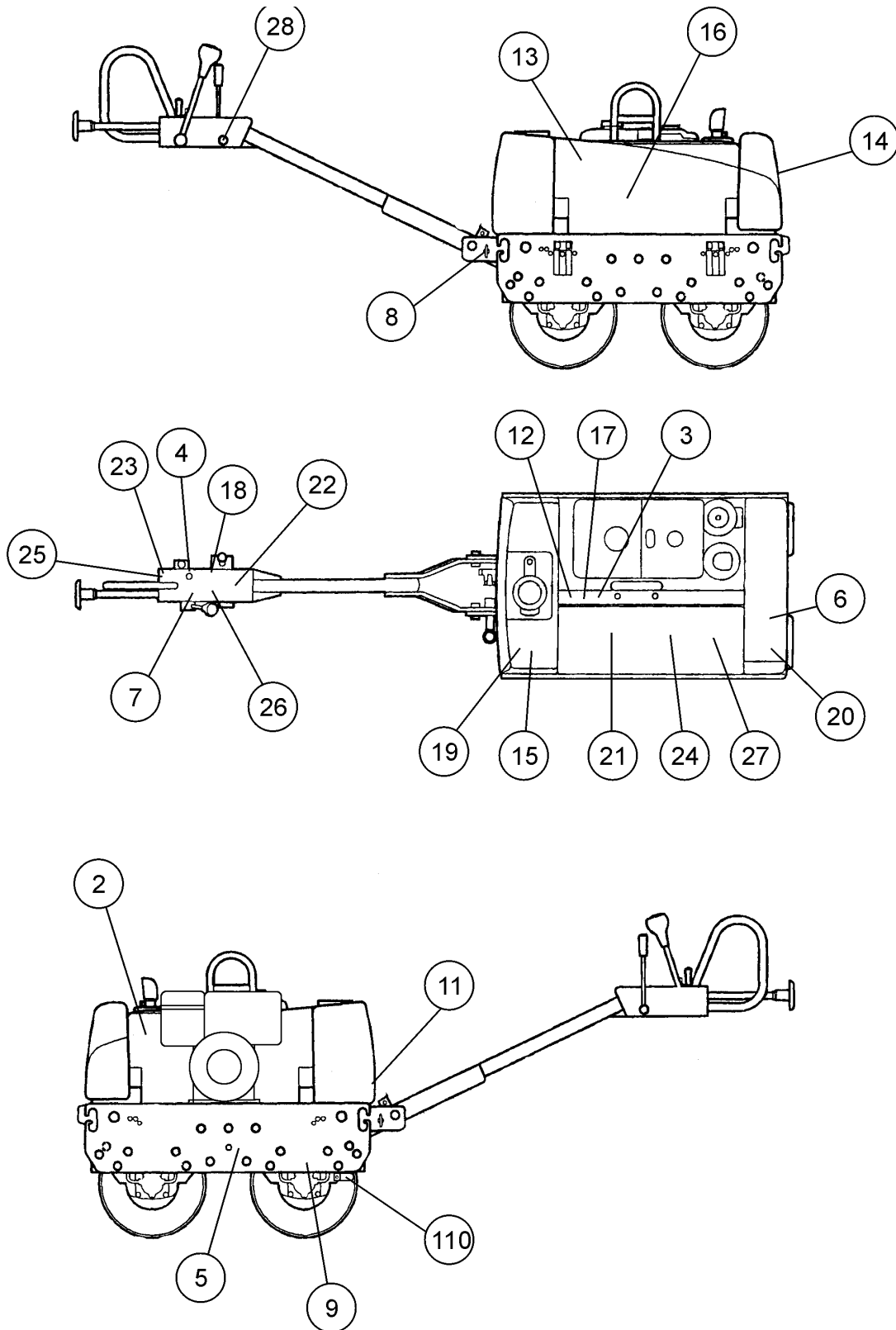
The contents of this parts catalog are subject to change without notice.

**MRH-800DS VIBRATION ROLLER 1 TO 3  
UNITS WITH YANMAR L100EE-DEVMK2  
DIESEL ENGINE**

| Qty.    | P/N             | Description                |
|---------|-----------------|----------------------------|
| 1 ..... | 954401890 ..... | FILTER, WATER TANK         |
| 2 ..... | 954001380 ..... | FILTER, HYDRAULIC OIL      |
| 2 ..... | 070503000 ..... | V-BELT, ENGINE             |
| 1 ..... | 956100022 ..... | THROTTLE WIRE              |
| 1 ..... | 954300340 ..... | CAP, WATER TANK            |
| 2 ..... | 070100381 ..... | V-BELT, VIBRATOR ASSY.     |
| 1 ..... | 71487553101 ..  | VALVE ASSY., FUEL INJECTOR |
| 1 ..... | 71465651110 ..  | PUMP ASSY., FUEL INJECTOR  |
| 3 ..... | 11465012590 ..  | ELEMENT, AIR CLEANER       |
| 1 ..... | 11428855041 ..  | CAP ASSY., FUEL TANK       |
| 2 ..... | 11425035110 ..  | STRAINER, LUB. OIL ASSY.   |
| 1 ..... | 11425055100 ..  | FILTER, FUEL STRAINER      |
| 2 ..... | 11425055121 ..  | FILTER, FUEL OIL           |
| 2 ..... | 955000010 ..... | KEY, STARTING              |

# MRH-800DS VIBRATION ROLLER — DECAL PLACEMENT

## DECAL PLACEMENT





# MRH-800DS VIBRATION ROLLER — DECAL PLACEMENT

## PLACEMENT

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>                       | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|--|-------------|----------------|
| 1          | 920205690       | DECAL, BRAKE LEVER .....               | 1 .....     | NPA-569        |
| 2          | 9202009660      | DECAL, CAUTION - ENGINE SPEED .....    | 1 .....     | NPA-966        |
| 3          | 920206280       | DECAL, DANGER - PINCH POINT .....      | 1 .....     | NPA-628        |
| 4          | 920102490       | DECAL, LIGHT SWITCH .....              | 1 .....     | NPA-249        |
| 5          | 920101480       | DECAL, CHECK OIL LEVEL .....           | 1 .....     | NP-148         |
| 6          | DCL210          | DECAL, MIKASA MOBILE DTE 25            | 1           |                |
| 7          | 920108070       | DECAL, FORWARD/REVERSE LEVER .....     | 1 .....     | NPA-507        |
| 8          | 920100120       | DECAL, GREASE POINT .....              | 1 .....     | NPA-120        |
| 9          | 920208070       | DECAL, PARKING BREAK .....             | 1 .....     | NPA-907        |
| 10         | 920206160       | DECAL, CAUTION - INCLINE PARKING ..... | 1 .....     | NPA-616        |
| 11         | 920206200       | DECAL, WATER TANK SPRINKLE PIPE .....  | 1 .....     | NPA-620        |
| 12         | 920203330       | DECAL, HEARING PROTECTION .....        | 1 .....     | NPA-333        |
| 13         | 920201910       | DECAL, MULTIQUIP - CARSON .....        | 1 .....     | NPA-191        |
| 14         | 920101510       | DECAL, MIKASA .....                    | 1 .....     | NP-151         |
| 15         | 920200320       | DECAL, WATER TANK .....                | 1 .....     | NP-32          |
| 16         | 920207620       | DECAL, MRH-800DS .....                 | 1 .....     | NPA-762        |
| 17         | 920206290       | DECAL, CAUTION - OWNERS MANUAL .....   | 1 .....     | NPA-629        |
| 18         | 920202810       | DECAL, CAUTION - VIBRATION LEVER ..... | 1 .....     | NPA-281        |
| 19         | 920104280       | DECAL, FREEZING PREVENTION .....       | 1 .....     | NPA-428        |
| 20         | 920200470       | DECAL, OIL TANK .....                  | 1 .....     | NPA-47         |
| 21         | 920202870       | DECAL, CAUTION - INSTRUCTIONS PLATE .. | 1 .....     | NPA-287        |
| 22         | 920205640       | DECAL, WARNING - INCLINE PARKING ..... | 1 .....     | NPA-564        |
| 23         | 920105170       | DECAL, THROTTLE .....                  | 1 .....     | NPA-517        |
| 24         | 920202860       | DECAL, CAUTION - MOVING PLATE .....    | 1 .....     | NPA-286        |
| 25         | 920201450       | DECAL, HORN .....                      | 1 .....     | NPA-145        |
| 26         | 920202920       | DECAL, CAUTION - STARTING ENGINE ..... | 1 .....     | NPA-292        |
| 27         | 920205680       | DECAL, WARNING - INCLINE PLATE .....   | 1 .....     | NPA-292        |
| 28         | 920106760       | DECAL, IGNITION .....                  | 1 .....     | NPA-676        |



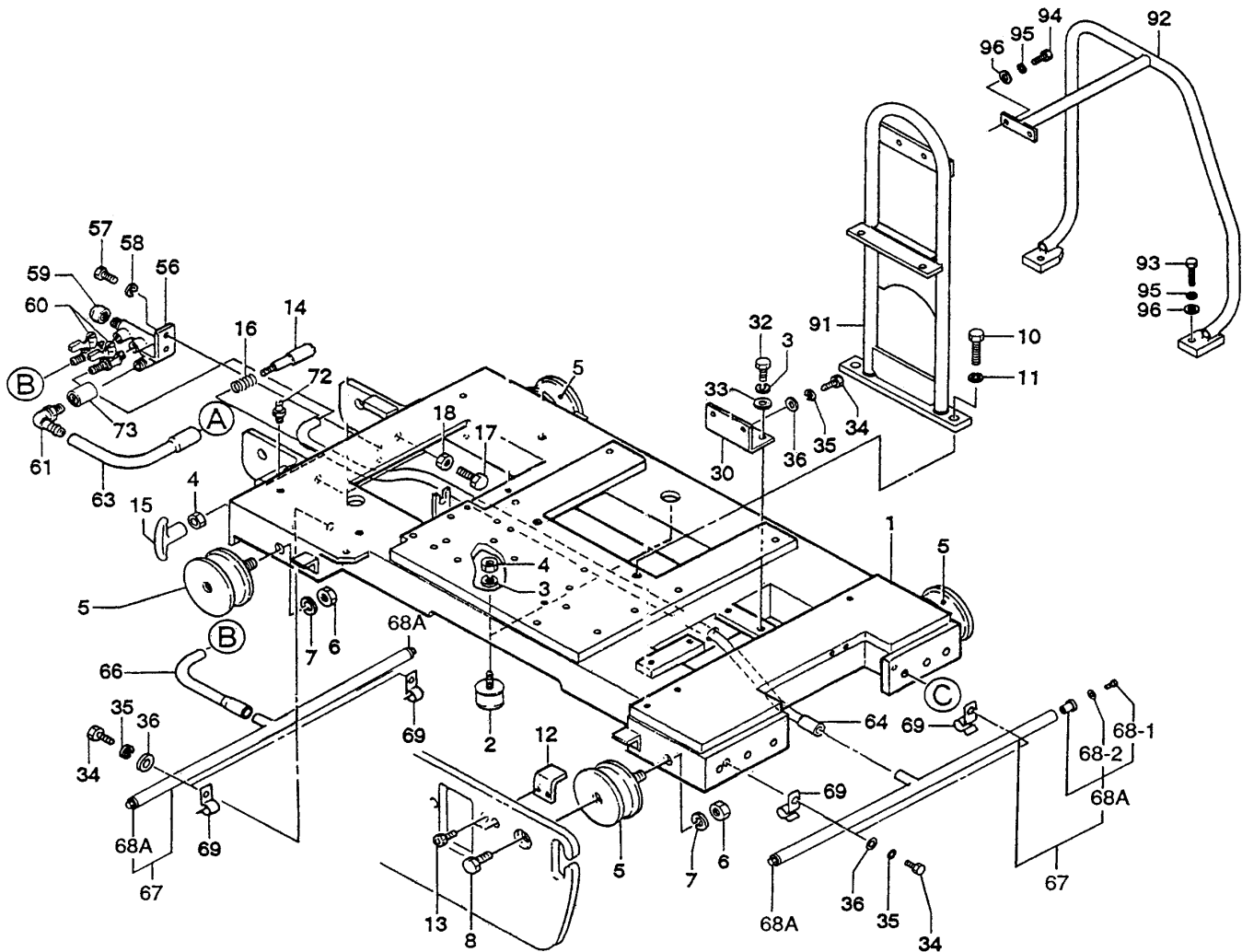
# MRH-800DS VIBRATION ROLLER — AXLE ASSY.

## AXLE ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>       | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|------------------------|-------------|----------------|
| 1          | 515112960       | DRUM                   | 1           |                |
| 2          | 515112970       | DRUM                   | 1           |                |
| 3          | 515333990       | GEAR PLATE             | 2           |                |
| 4          | 515334000       | GEAR (39)              | 2           |                |
| 5          | 509429660       | COLLAR 405510          | 2           |                |
| 6          | 001121630       | BOLT 16X30 T           | 16          |                |
| 7          | 515117050       | DRUM BRACKET (R)       | 2           |                |
| 8          | 506425980       | FELT (DRUM) 5X5X1200   | 1           |                |
| 9          | 060605020       | OIL SEAL VC-55727      | 2           |                |
| 10         | 042006308       | BEARING 6308DU         | 4           |                |
| 11         | 020130240       | NUT M30, P2.0          | 4           |                |
| 12         | 031130450       | WASHER M30             | 4           |                |
| 13         | 515334010       | BEARING COVER (R)      | 2           |                |
| 14         | 050100850       | O-RING G-85            | 2           |                |
| 15         | 001221025       | BOLT 10X25 T           | 20          |                |
| 16         | 030210250       | WASHER M10             | 28          |                |
| 17         | 505015060       | GREASE FITTING A-PT1/8 | 4           |                |
| 18         | 351010050       | GREASE FITTING A-MT6X1 | 2           |                |
| 19         | 515113000       | DRUM BRACKET (L)       | 1           |                |
| 20         | 515113010       | DRUM BRACKET (LB)      | 1           |                |
| 21         | 506425670       | COLLAR 405520          | 2           |                |
| 22         | 060705010       | OIL SEAL TB4-55729     | 2           |                |
| 23         | 515334040       | BEARING COVER (L)      | 2           |                |
| 24         | 050300950       | O-RING S-95            | 2           |                |
| 25         | 515446960       | LOCK PUN, BRAKE        | 1           |                |
| 26         | 515446950       | SPRING, BRAKE          | 1           |                |
| 27         | 025405025       | SPRING PIN 5X25        | 1           |                |
| 28         | 515446970       | KNOB, BRAKE            | 1           |                |
| 29         | 020410060       | NUT M10, H=6           | 1           |                |
| 30         | 515117040       | SIDE PLATE (R)         | 1           |                |
| 31         | 515114350       | SIDE PLATE (L)         | 1           |                |
| 32         | 001221430       | BOLT 14X30 T           | 16          |                |
| 33         | 515341930       | BRACKET (A), SCRAPER   | 2           |                |
| 34         | 515341940       | VRACKET (B), SCRAPER   | 2           |                |
| 35         | 515334020       | SCRAPER (OUT)          | 2           |                |
| 36         | 515447510       | MOUNT NUT, SCRAPER     | 4           |                |
| 37         | 001121435       | BOLT 14X35 T           | 8           |                |
| 38         | 001221030       | BOLT 10X30 T           | 8           |                |
| 39         | 031110160       | WASHER M10             | 12          |                |
| 40         | 515334030       | SCRAPER (IN)           | 2           |                |
| 41         | 959010330       | GREASE FITTING B-M6FX1 | 1           |                |

# MRH-800DS VIBRATION ROLLER — BASE ASSY.

BASE ASSY.



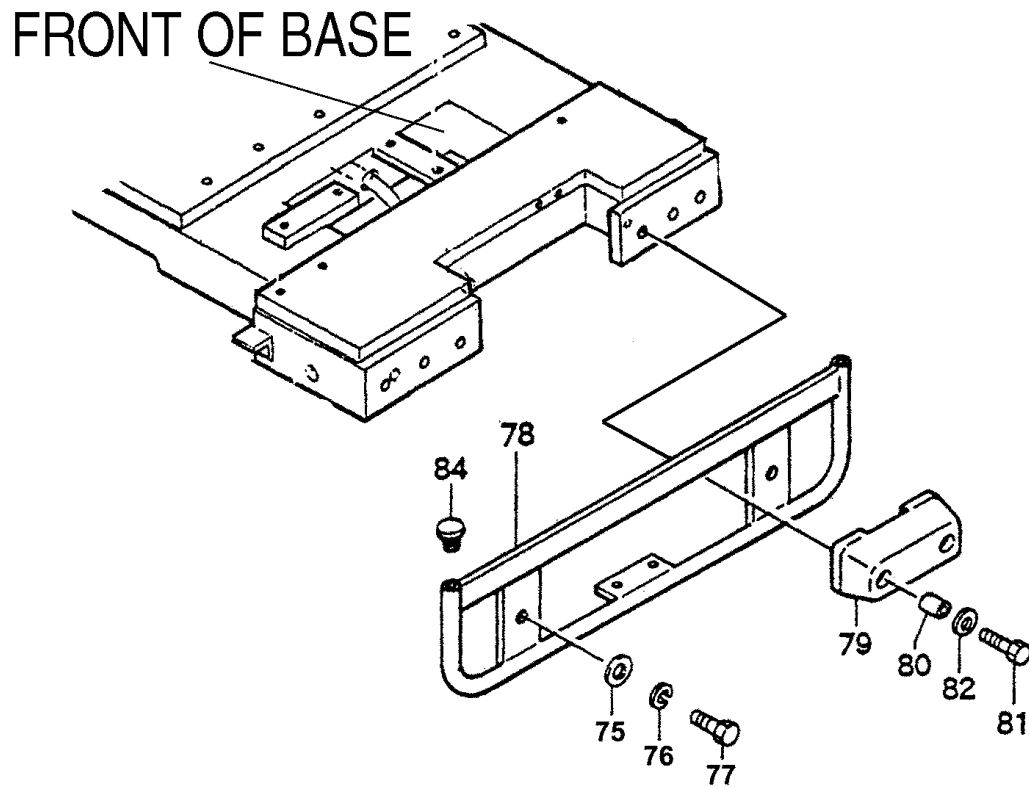
# MRH-800DS VIBRATION ROLLER — BASE ASSY.

BASE ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>             | <u>QTY.</u> | <u>REMARKS</u>     |
|------------|-----------------|------------------------------|-------------|--------------------|
| 1          | 515114460       | BASE (YANMAR-L100)           | 1           |                    |
| 2          | 939010010       | SHOCK ABSORBER, STOPPER 45   | 2           |                    |
| 3          | 030210250       | WASHER, LOCK M10             | 9           |                    |
| 4          | 020310080       | NUT M10                      | 3           |                    |
| 5          | 930710031       | SHOCK ABSORBER RV1-100       | 4           |                    |
| 6          | 020316130       | NUT M16                      | 4           |                    |
| 7          | 030216400       | WASHER, LOCK M16             | 4           |                    |
| 8          | 001221625       | BOLT 16X25 T                 | 4           |                    |
| 10         | 001221440       | BOLT 14X40 T                 | 2           |                    |
| 11         | 030214350       | WASHER, LOCK M14             | 2           |                    |
| 12         | 515447010       | SAFETY GUARD                 | 4           |                    |
| 13         | 001520815       | SOCKET HEAD BOLT 8X13 T      | 8           |                    |
| 14         | 501402870       | HANDLE STOPPER               | 1           |                    |
| 15         | 959010413       | EYE NUT M10                  | 1           |                    |
| 15         | 959010416       | T- KNOB (M10)                | 1           |                    |
| 16         | 501402880       | SPRING / HANDLE (1. 4X18X44) | 1           |                    |
| 17         | 001221230       | BOLT 12X30 T                 | 2           |                    |
| 18         | 0039312000      | NUT M12 .....                | 2           | REPLACES 020312100 |
| 30         | 5153344100      | STAY, COVER (F)              | 1           |                    |
| 32         | 012210020       | BOLT 10X20 T .....           | 5           | REPLACES 001221020 |
| 33         | 031110160       | WASHER, FLAT M10             | 7           |                    |
| 34         | 0105050616      | BOLT 6X15 T .....            | 8           | REPLACES 001220615 |
| 35         | 030206150       | WASHER, LOCK M6              | 8           |                    |
| 36         | 952404470       | WASHER, FLAT M6 .....        | 8           | REPLACES 031106100 |
| 56         | 515334050       | SUPPORT , WATER COCK         | 1           |                    |
| 57         | 014208020       | BOLT 8X20 T .....            | 2           | REPLACES 001220820 |
| 58         | 030208200       | SWM8                         | 2           |                    |
| 59         | 509010010       | CAP 3/8                      | 1           |                    |
| 60         | 954403240       | COCK PT1/4, BH-1211 (PL)     | 2           |                    |
| 61         | 954405660       | ELBOW 3/8X12                 | 1           |                    |
| 63         | 515446980       | WATER HOSE (T-V) 300L        | 1           |                    |
| 64         | 515446990       | WATER HOSE (F) 1200L         | 1           |                    |
| 66         | 515447470       | WATER HOSE (R) 260L          | 1           |                    |
| 67         | 515910030       | SPRINKLING PIPE AY MRH       | 2           | INCLUDES ITEMS W/* |
| 68         | 506425750       | CAP, SPRINKLING PIPE         | 4           |                    |
| 68A*       | 515910050       | CAP AY, W/BOLT, WASHER ..... | 4           | INCLUDES ITEMS W/+ |
| 68-1+      | 001220620       | BOLT 6X20 T                  | 4           |                    |
| 68-2+      | 031106100       | WASHER, FLAT M6              | 4           |                    |
| 69         | 515449900       | CLAMP 00                     | 4           |                    |
| 72         | 171010120       | GREASE FITTING A-M6F         | 1           |                    |
| 73         | 954001590       | SOCKET PT3/8-3/8             | 1           |                    |
| 91         | 515213600       | HOOK (L100)                  | 1           |                    |
| 92         | 515113710       | GUARD (L100)                 | 1           |                    |
| 93         | 001221035       | BOLT 10X35T                  | 2           |                    |
| 94         | 001221020       | BOLT 10X20t                  | 2           |                    |
| 95         | 030210250       | WASHER, LOCK M10             | 4           |                    |
| 96         | 091004016       | WASHER, FLAT M10             | 4           |                    |

# MRH-800DS VIBRATION ROLLER — FRONT GUARD ASSY.

FRONT GUARD ASSY.



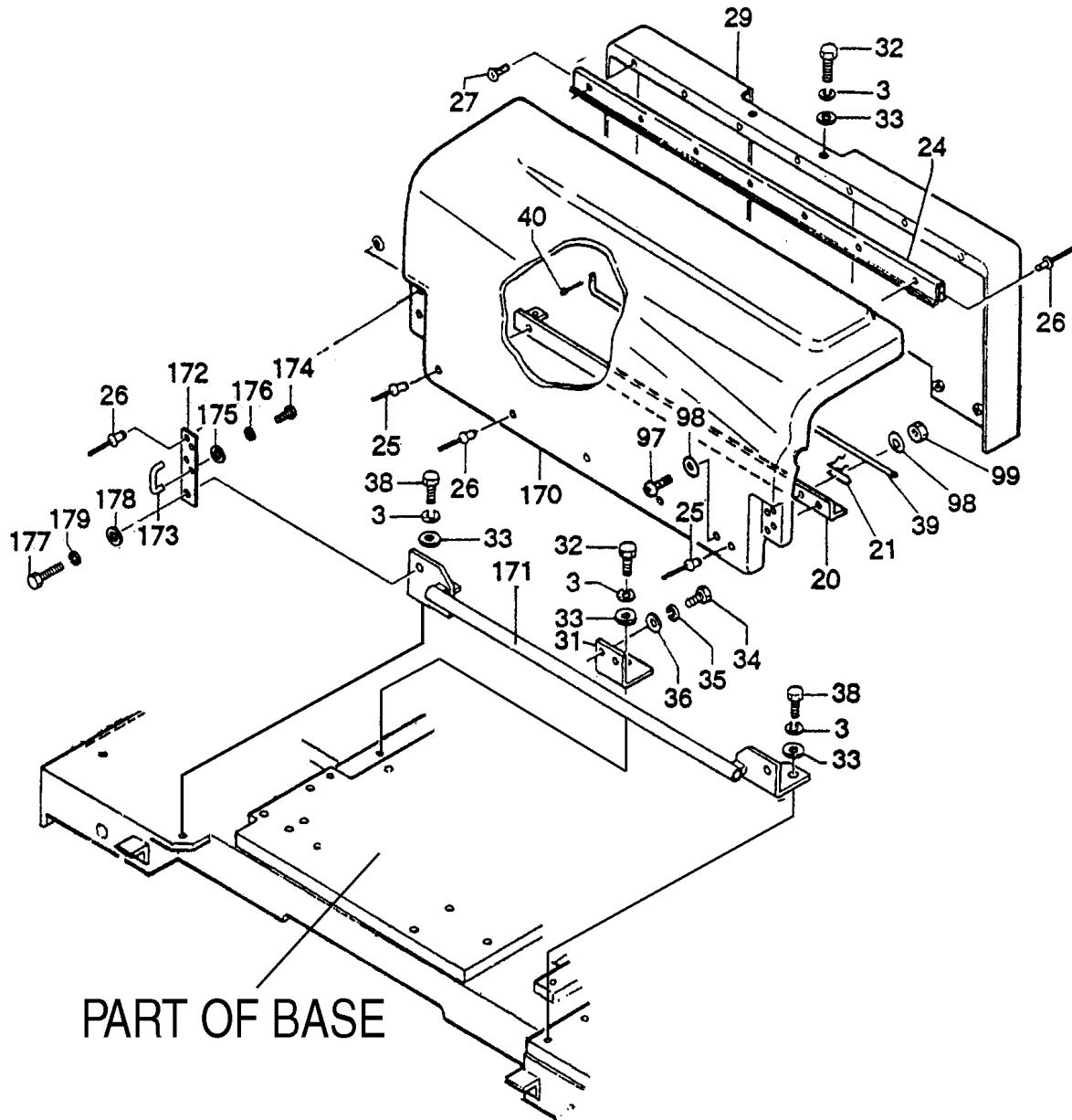
## MRH-800DS VIBRATION ROLLER — FRONT GUARD ASSY.

### FRONT GUARD ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|------------------|-------------|----------------|
| 75         | 031110160       | FLAT WASHER, M10 | 2           |                |
| 76         | 030210250       | LOCK WASHER, M10 | 2           |                |
| 77         | 001221035       | BOLT 10x35 mm    | 2           |                |
| 78         | 515336200       | FRONT GUARD      | 1           |                |
| 79         | 515336210       | BUMPER           | 2           |                |
| 80         | 515449720       | SPACER, BUMPER   | 4           |                |
| 81         | 001221040       | BOLT 10X40 T     | 4           |                |
| 82         | 031110160       | WASHER, FLAT M10 | 4           |                |
| 84         | 953405940       | PIPE INSERT PZ-7 | 2           |                |

# MRH-800DS VIBRATION ROLLER — SIDE COVER ASSY.

SIDE COVER ASSY.





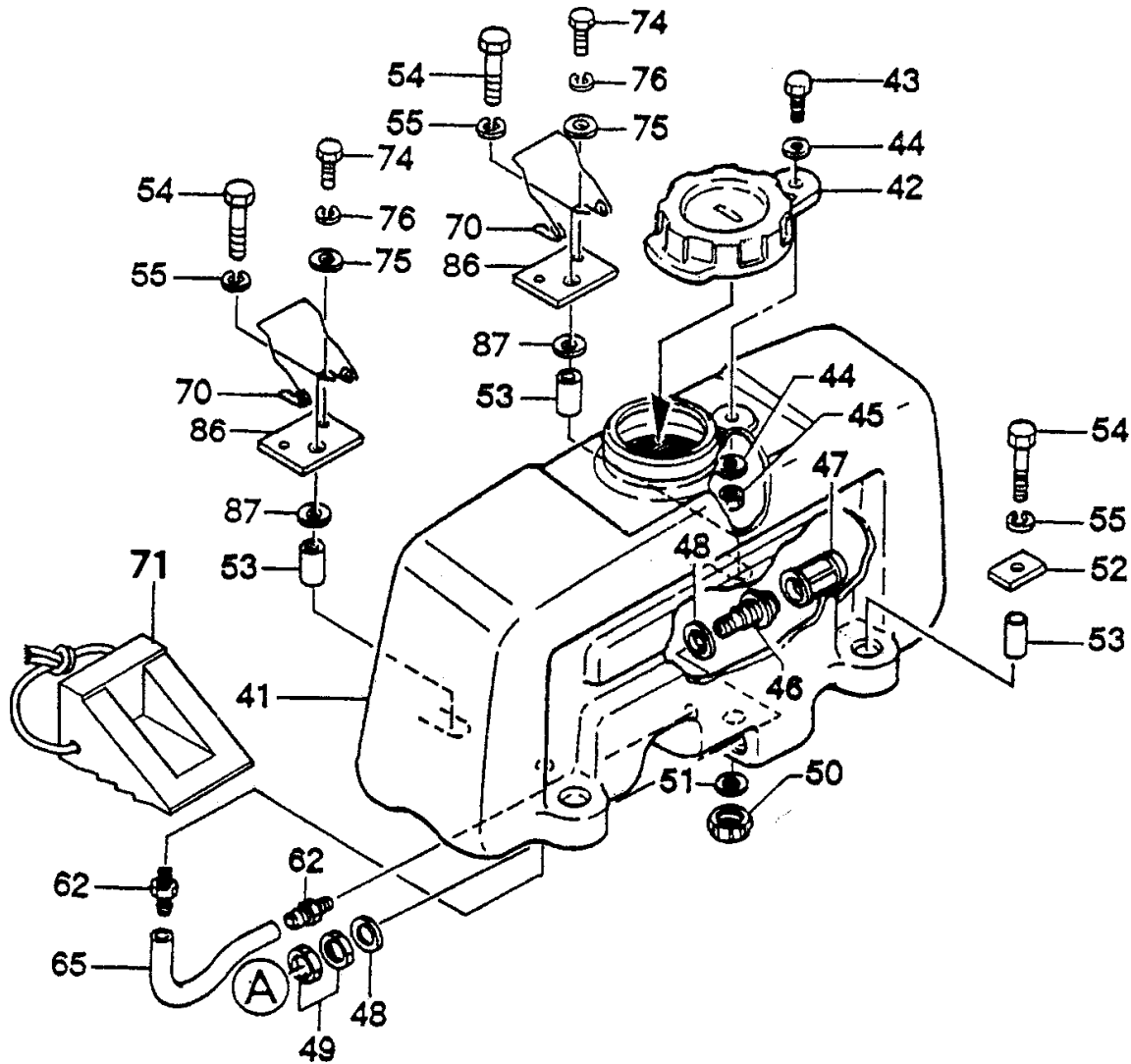
# MRH-800DS VIBRATION ROLLER — SIDE COVER ASSY.

## SIDE COVER ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>      | <u>QTY.</u> | <u>REMARKS</u>     |
|------------|-----------------|-----------------------|-------------|--------------------|
| 3          | 030210250       | WASHER, LOCK M10      | 9           |                    |
| 20         | 515336250       | SUPPORT, COVER        | 1           |                    |
| 21         | 515449890       | ROD HOLDER            | 1           |                    |
| 24         | 515334600       | RUBBER HINGE          | 1           |                    |
| 25         | 515010090       | RIVET                 | 2           |                    |
| 26         | 515010100       | RIVET                 | 14          |                    |
| 27         | 092004008       | SCREW 4X8             | 7           |                    |
| 29         | 515113080       | COVER, E/G            | 1           |                    |
| 31         | 515447030       | STAY, COVER (R)       | 1           |                    |
| 32         | 012210020       | BOLT 10X20 T .....    | 5           | REPLACES 001221020 |
| 33         | 031110160       | WASHER, FLAT M10      | 7           |                    |
| 34         | 0105050616      | BOLT 6X15 T .....     | 8           | REPLACES 001220615 |
| 35         | 030206150       | WASHER, LOCK M6       | 8           |                    |
| 36         | 952404470       | WASHER, FLAT M6 ..... | 8           | REPLACES 031106100 |
| 38         | 0105091025      | BOLT 10X25 T .....    | 2           | REPLACES 001221025 |
| 39         | 515447380       | ROD, COVER            | 1           |                    |
| 40         | 607010080       | COTTER PIN 6          | 1           |                    |
| 97         | 091004016       | SCREW 4X16            | 1           |                    |
| 98         | 031104080       | WASHER, FLAT M4       | 2           |                    |
| 99         | 020304030       | NUT M4                | 1           |                    |
| 170        | 515114870       | COVER (EXP)           | 1           |                    |
| 171        | 515214240       | STAY, COVER (EXP)     | 1           |                    |
| 172        | 515450780       | HANDLE BRACKET        | 2           |                    |
| 173        | 515450790       | HANDLE (COVER)        | 2           |                    |
| 174        | 091004015       | SCREW 4X15            | 4           |                    |
| 175        | 031104080       | WASHER, FLAT M4       | 4           |                    |
| 176        | 030204100       | WASHER, LOCK M4       | 4           |                    |
| 177        | 001220815       | BOLT 8X15 T           | 2           |                    |
| 178        | 031108160       | WASHER, FLAT M8       | 2           |                    |
| 179        | 030208200       | WASHER, LOCK M8       | 2           |                    |

# MRH-800DS VIBRATION ROLLER — WATER TANK ASSY.

WATER TANK ASSY.



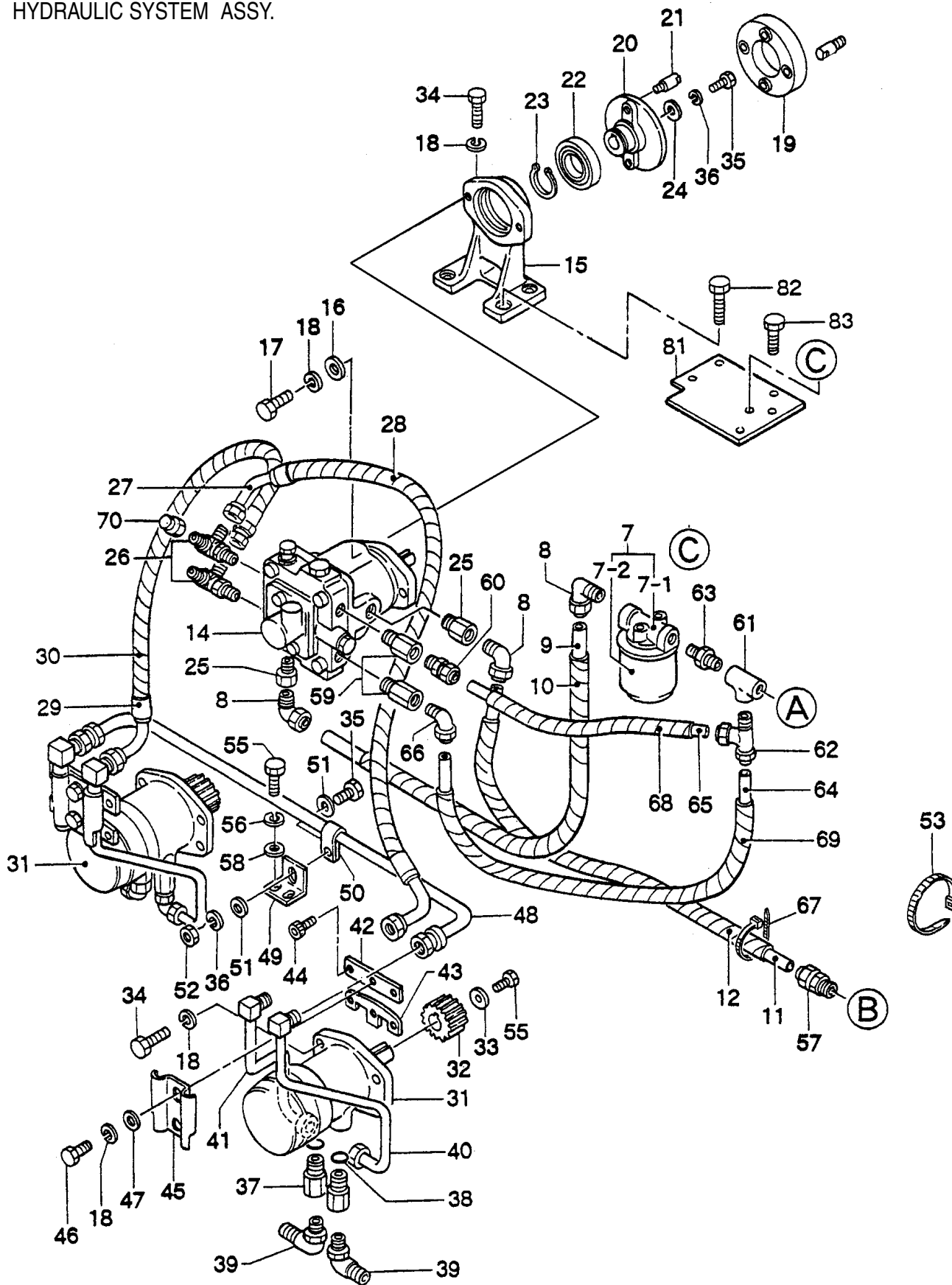
# MRH-800DS VIBRATION ROLLER — WATER TANK ASSY.

## WATER TANK ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>       | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|------------------------|-------------|----------------|
| 41         | 515114200       | WATER TANK             | 1           |                |
| 42         | 954300340       | CAP, WATER TANK /MR    | 1           |                |
| 43         | 001241030       | BOLT 10X30 U           | 1           |                |
| 44         | 033910010       | WASHER 10.5X21X2 SUS   | 2           |                |
| 45         | 022910180       | NYLON NUT M10 (SUS)    | 1           |                |
| 46         | 954404910       | HOSE JOINT 17D         | 1           |                |
| 47         | 954404890       | FILTER, TANK /MR       | 1           |                |
| 48         | 953404900       | PACKING 26X36X3        | 2           |                |
| 49         | 959404880       | NUT 3/4                | 2           |                |
| 50         | 506403990       | CAP PS1                | 2           |                |
| 51         | 953404000       | PACKING, CAP PS1       | 1           |                |
| 52         | 506434680       | STOPPER, FRONT         | 2           |                |
| 53         | 506434690       | SPACER, WATER TANK 39L | 4           |                |
| 54         | 001221253       | BOLT 12X65 T           | 4           |                |
| 55         | 030212300       | WASHER, LOCK M12       | 4           |                |
| 62         | 954405680       | CONNECTOR 1/4x10       | 2           |                |
| 65         | 515447000       | WATER LOSE (T) 280     | 1           |                |
| 70         | 515449870       | HOLDER, STOPPER        | 2           |                |
| 71         | 515448290       | STOPPER                | 2           |                |
| 71         | 517338540       | STOPPER                | 2           |                |
| 74         | 001220610       | BOLT 6X10 T            | 4           |                |
| 75         | 031106100       | WASHER, FLAT M6        | 4           |                |
| 76         | 030206150       | WASHER, LOCK M6        | 4           |                |
| 86         | 515449880       | HOLDER (R)             | 2           |                |
| 87         | 952405950       | WASHER 13506           | 2           |                |

# MRH-800DS VIBRATION ROLLER — HYDRAULIC SYSTEM ASSY.

HYDRAULIC SYSTEM ASSY.



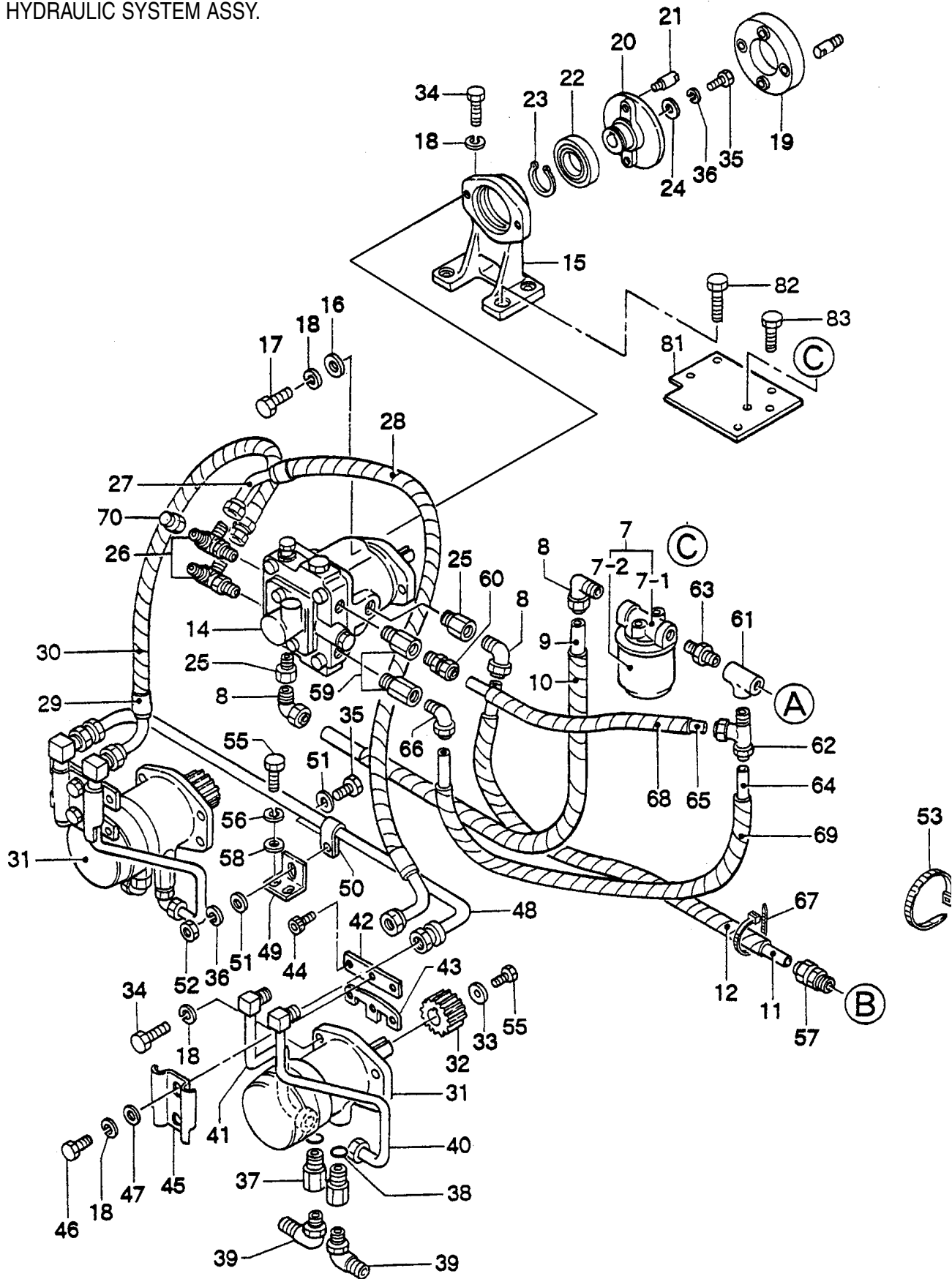
# MRH-800DS VIBRATION ROLLER — HYDRAULIC SYSTEM ASSY.

## HYDRAULIC SYSTEM ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>          | <u>QTY.</u> | <u>REMARKS</u>     |
|------------|-----------------|---------------------------|-------------|--------------------|
| 7          | 954001350       | OIL FILTER CPO 3-80 ..... | 1           | INCLUDES ITEMS W/* |
| 7-1*       | 954001390       | FILTER HEAD               | 1           |                    |
| 7-2*       | 954001380       | OIL ELEMENT               | 1           |                    |
| 8          | 954001530       | ELBOW LIN-1/2-PT3/8       | 3           |                    |
| 9          | 954001501       | TUBE 9.6-12.7 - 300       | 1           |                    |
| 10         | 959020011       | SPIRAL TUBE 11D-350L      | 1           |                    |
| 11         | 954001511       | TUBE 9.6-12.7-360         | 1           |                    |
| 12         | 955404275       | SPIRAL TUBE 11D-400L      | 1           |                    |
| 14         | 515010050       | OIL PUMP PV10-610         | 1           |                    |
| 14         | 515010110       | OIL PUMP PV10 -625        | 1           |                    |
| 15         | 515114390       | BRACKET (PV10)            | 1           |                    |
| 16         | 952404110       | COLLAR 10225              | 2           |                    |
| 17         | 012210035       | BOLT 10X35 T .....        | 2           | REPLACES 001221035 |
| 18         | 030210250       | WASHER, LOCK M10          | 22          |                    |
| 19         | 515334070       | COUPLING                  | 1           |                    |
| 20         | 515334080       | FLANGE (PV10)             | 1           |                    |
| 21         | 515447020       | COUPLING PIN              | 2           |                    |
| 22         | 046006009       | BEARING 6009DDU           | 1           |                    |
| 23         | 080200450       | STOP RING S -45           | 1           |                    |
| 24         | 952400450       | WASHER 7X30X4.5           | 1           |                    |
| 25         | 954001460       | BUSHING CP-3/8            | 2           |                    |
| 26         | 954001710       | ELBOW PF3/8 - PF1/4X2     | 2           |                    |
| 27         | 954001370       | OIL HOSE ML90-ML90X560    | 1           |                    |
| 27         | 954001830       | OIL HOSE ML90-ML90X560 BS | 1           |                    |
| 28         | 959020013       | SPIRAL TUBE 11D-600L      | 1           |                    |
| 29         | 516010080       | OIL HOSE ML90-1005X600    | 1           |                    |
| 29         | 954001840       | OIL HOSE ML90-1005X600 BS | 1           |                    |
| 30         | 955404270       | SPIRAL TUBE/11D-700L      | 1           |                    |
| 31         | 515010040       | OIL MOTOR K2355(BLUE)     | 2           |                    |
| 32         | 515446940       | PINION (12)               | 2           |                    |
| 33         | 952400130       | WASHER 9304               | 2           |                    |
| 34         | 012210035       | BOLT 10X35 T .....        | 14          | REPLACES 001221035 |
| 35         | 0105050616      | BOLT 6X15 T .....         | 2           | REPLACES 001220615 |
| 36         | 030206150       | WASHER, LOCK M6           | 2           |                    |
| 37         | 515447130       | JOINT 1/2-3/8-31          | 4           |                    |
| 38         | 050210180       | O-RING P-18-1B            | 4           |                    |
| 39         | 512010120       | JOINT, LLM-UE-10X3/8-B    | 4           |                    |
| 40         | 515447110       | PIPE, OM-A-E              | 2           |                    |
| 41         | 515447120       | PIPE, OM-B-E              | 2           |                    |

# MRH-800DS VIBRATION ROLLER — HYDRAULIC SYSTEM ASSY.

HYDRAULIC SYSTEM ASSY.



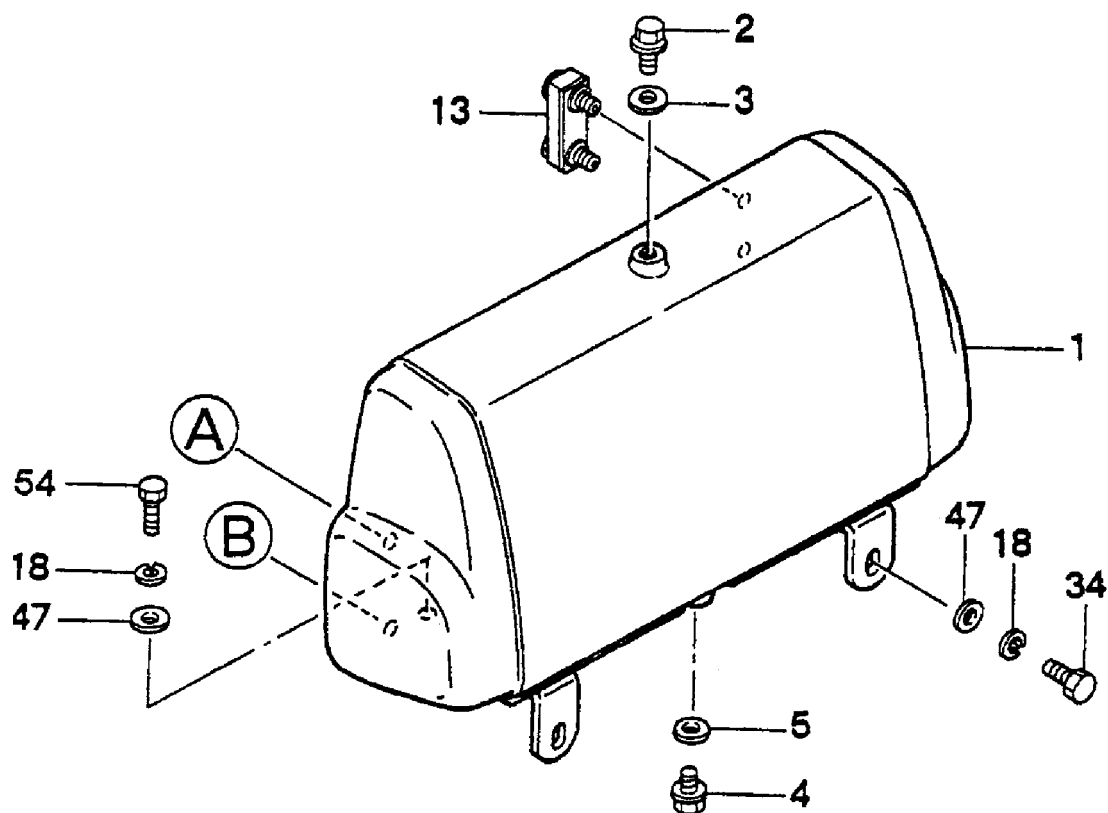
# MRH-800DS VIBRATION ROLLER — HYDRAULIC SYSTEM ASSY.

## HYDRAULIC SYSTEM ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>           | <u>QTY.</u> | <u>REMARKS</u>     |
|------------|-----------------|----------------------------|-------------|--------------------|
| 42         | 515447160       | HOLDER, UPPER              | 2           |                    |
| 43         | 515447170       | HOLDER, LOWER              | 2           |                    |
| 44         | 001520820       | SOCKET HEAD BOLT 8X20 T    | 8           |                    |
| 45         | 515447140       | COVER, PIPE                | 2           |                    |
| 46         | 012210020       | BOLT 10X20 T .....         | 4           | REPLACES 001221020 |
| 47         | 031110160       | WASHER, FLAT M10           | 8           |                    |
| 48         | 515447150       | PIPE, OM-B--OM-A           | 1           |                    |
| 49         | 515447300       | STAY, PIPE                 | 1           |                    |
| 50         | 607010040       | CLAMP CLA-3200 (7D)        | 1           |                    |
| 51         | 952404470       | WASHER, FLAT M6 .....      | 2           | REPLACES 031106100 |
| 52         | 020106050       | NUT M6 .....               | 1           | REPLACES 020306050 |
| 53         | 507010110       | CLAMP TC-200               | 5           |                    |
| 55         | 014208020       | BOLT 8X20 T .....          | 4           | REPLACES 001220820 |
| 56         | 030208200       | WASHER, LOCK M8            | 2           |                    |
| 57         | 954001520       | ADAPTER CIN-1/2XPT3/8      | 1           |                    |
| 58         | 031108160       | WASHER, FLAT M8            | 2           |                    |
| 59         | 515335300       | CHECK VALVE 7/16           | 2           |                    |
| 60         | 954001090       | ADAPTER CIN-3/8-PT1/4      | 1           |                    |
| 61         | 954001010       | JOINT PT3/8                | 1           |                    |
| 62         | 954001620       | FITTING, TEE STIN3/8-PT3/8 | 1           |                    |
| 63         | 954001630       | NIPPLE PT3/8               | 1           |                    |
| 64         | 954001650       | TUBE 9.5D-7D-370           | 1           |                    |
| 65         | 954001640       | TUBE 9.5D-7D-290           | 1           |                    |
| 66         | 954001100       | ELBOW LIN-3/8-PT1/4        | 1           |                    |
| 67         | 454010020       | CLAMP TC-100               | 12          |                    |
| 68         | 959021817       | SPIRAL TUBE 6D-350L        | 1           |                    |
| 69         | 959021818       | SPIRAL TUBE 6D-510L        | 1           |                    |
| 70         | 954001040       | CAP PF1/4                  | 2           |                    |
| 81         | 515335451       | SPACER (PV10)              | 1           |                    |
| 82         | 0109051045      | BOLT 10X40 T .....         | 4           | REPLACES 001221040 |
| 83         | 012010030       | BOLT 10X30 T .....         | 2           | REPLACES 001221030 |
| 84         | 515447020       | COUPLING PIN               | 2           |                    |

# MRH-800DS VIBRATION ROLLER — HYDRAULIC OIL TANK ASSY.

HYDRAULIC OIL TANK ASSY.



**(A)** NOTE:  
**(B)** SEE PAGE 52 FOR  
OIL TANK HOSE  
CONNECTIONS



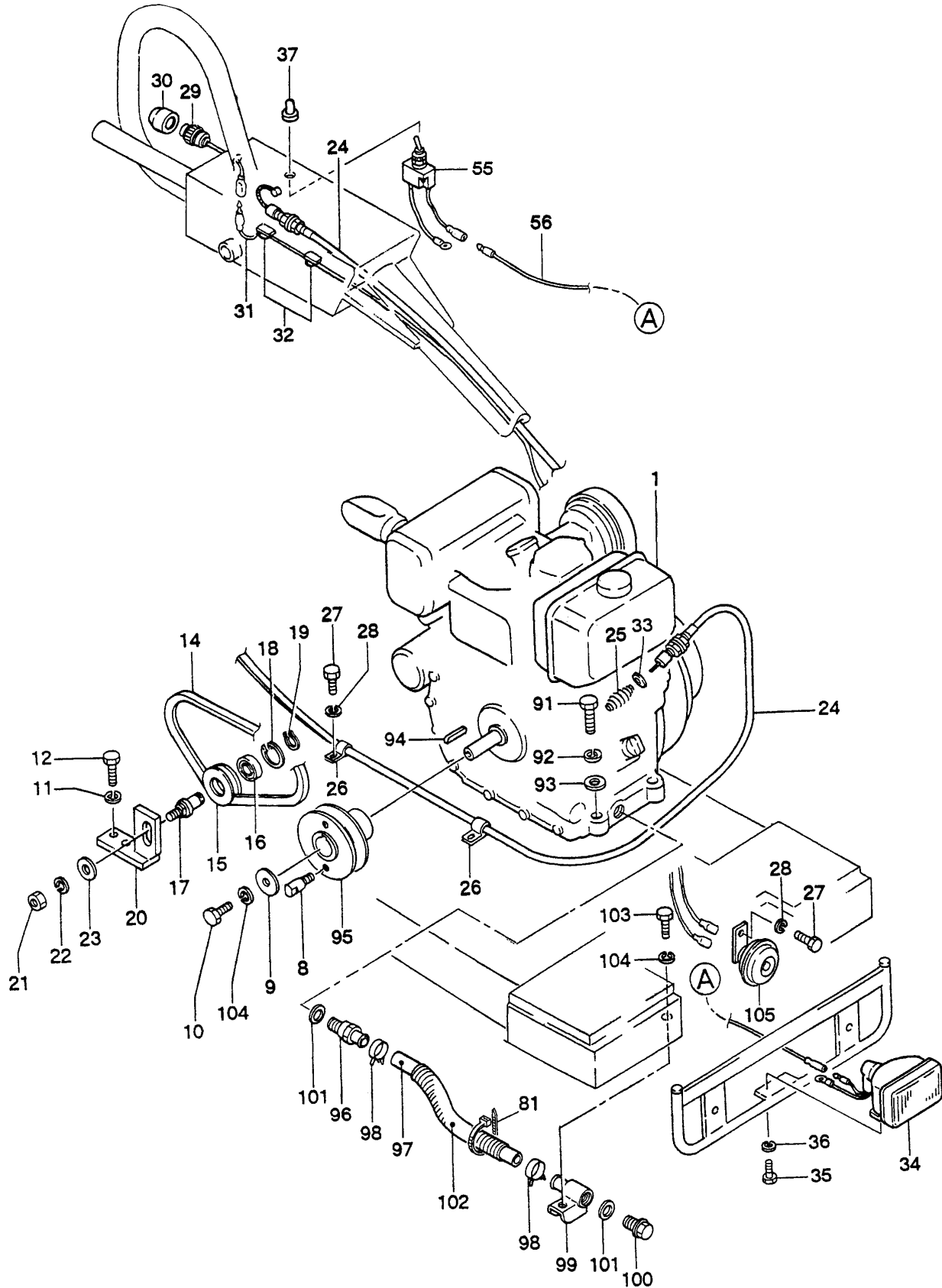
# MRH-800DS VIBRATION ROLLER — HYDRAULIC OIL TANK ASSY.

## HYDRAULIC OIL TANK ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>           | <u>QTY.</u> | <u>REMARKS</u>      |
|------------|-----------------|----------------------------|-------------|---------------------|
| 1          | 515114221       | OIL TANK , (GREEN)         | 1           |                     |
| 1          | 515010140       | OIL TANK , (ORANGE)        | 1           |                     |
| 2          | 953405840       | DRAIN PLUG M18 .....       | 1 .....     | REPLACES 953102781  |
| 3          | 953402930       | COPPER PACKING 19X30X1     | 1           |                     |
| 4          | 953400270       | PLUG 1/4X14 10L            | 1           |                     |
| 5          | 953405260       | PACKING 1/4 (CU)           | 1           |                     |
| 13         | 959010120       | LEVEL GAUGE/L =60          | 1           |                     |
| 18         | 030210250       | WASHER, LOCK M10           | 22          |                     |
| 34         | 012210035       | BOLT 10X35 T .....         | 14 .....    | REPLACE)S 001221035 |
| 47         | 031110160       | WASHER, FLAT M10 IN SYSTEM | 8           |                     |
| 54         | 0105091025      | BOLT 10X25 T .....         | 2 .....     | REPLACES 001221025  |

# MRH-800DS VIBRATION ROLLER — ENGINE ASSY.

ENGINE ASSY. (YANMAR L100EE-DEVK2)



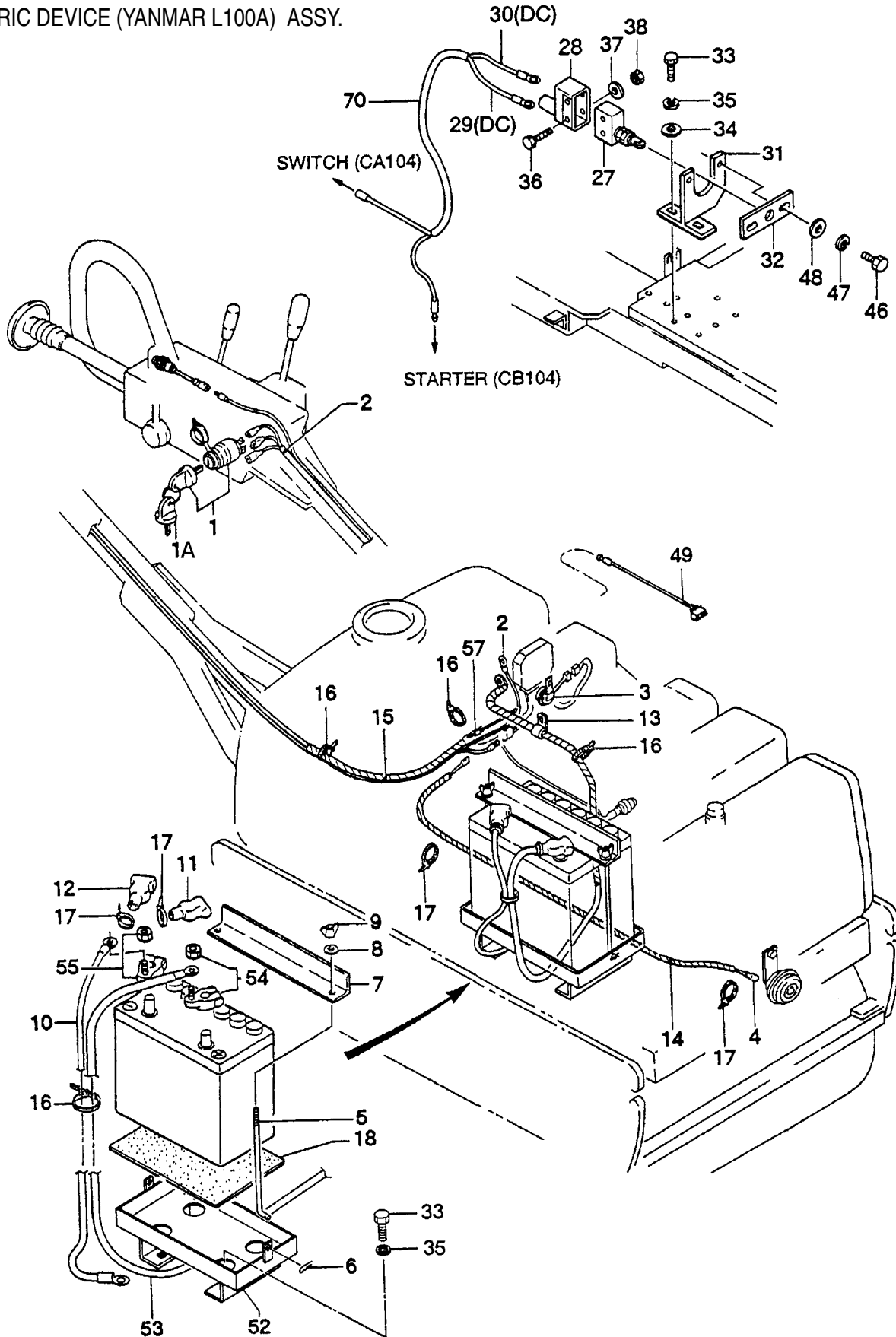
# MRH-800DS VIBRATION ROLLER — ENGINE ASSY.

ENGINE ASSY. (YANMAR L100EE-DEV MK2)

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>               | <u>QTY.</u> | <u>REMARKS</u>     |
|------------|-----------------|--------------------------------|-------------|--------------------|
| 1          | 914410004       | ENGINE ASSY. L100EE-DEV MK2    | 1           |                    |
| 8          | 515447020       | COUPLING PIN                   | 2           |                    |
| 9          | 952400690       | WASHER 9X35X4.5                | 1           |                    |
| 10         | 011208025       | BOLT 8X25 T .....              | 1           | REPLACES 001220825 |
| 11         | 030210250       | WASHER M10                     | 2           |                    |
| 12         | 012010030       | BOLT 10X30 T .....             | 2           | REPLACES 001221030 |
| 14         | 070503000       | V-BELT 3V- 300                 | 1           |                    |
| 15         | 515447050       | TIGHTENER PULLEY               | 1           |                    |
| 16         | 046006004       | BEARING 6004DDU                | 1           |                    |
| 17         | 515447060       | SHAFT, TIGHTENER               | 1           |                    |
| 18         | 080100420       | STOP RING R-42                 | 1           |                    |
| 19         | 080200200       | STOP RING S-20                 | 1           |                    |
| 20         | 515334180       | HOLDER, TIGHTNER               | 1           |                    |
| 21         | 020314110       | NUT M14                        | 1           |                    |
| 22         | 030214350       | WASHER M14                     | 1           |                    |
| 23         | 031114260       | WASHER M14                     | 1           |                    |
| 24         | 956100022       | THROTTLE WIRE 2560-2700        | 1           |                    |
| 25         | 2344600201      | RETURN SPRING                  | 1           |                    |
| 26         | 607010040       | CLAMP CLA-3200 (7D)            | 2           |                    |
| 27         | 011006010       | BOLT 6X10 T                    | 3           |                    |
| 28         | 030206150       | WASHER M6                      | 3           |                    |
| 29         | 955400800       | HORN BUTTON ASS'Y              | 1           |                    |
| 30         | 955405980       | COVER, HORN BUTTON             | 1           |                    |
| 31         | 515447320       | READ CORD, HORN (WASHER, LOCK) | 1           |                    |
| 32         | 955405710       | WIRE CLAMP                     | 2           |                    |
| 33         | 031104080       | WASHER M4                      | 1           |                    |
| 34         | 955200030       | HEAD LAMP AY 12V-25W           | 1           |                    |
| 35         | 0105050616      | BOLT 6X15 T .....              | 2           | REPLACES 001220615 |
| 36         | 030206150       | WASHER M6                      | 2           |                    |
| 37         | 304402600       | CAP                            | 1           |                    |
| 55         | 515447740       | SWITCH W/CORD                  | 1           |                    |
| 56         | 515449920       | READ CORD (LAMP)               | 1           |                    |
| 81         | 506010070       | CLAMP TC-150                   | 3           |                    |
| 91         | 012210040       | BOLT 10X40 T .....             | 4           | REPLACES 001221040 |
| 92         | 030210250       | WASHER M10                     | 4           |                    |
| 93         | 031110160       | WASHER M10                     | 4           |                    |
| 94         | 951405770       | KEY 7X7X36 RR                  | 1           |                    |
| 95         | 515338240       | ENGINE PULLEY 130D (L100)      | 1           |                    |
| 96         | 515448720       | NIPPLE, DRAIN                  | 1           |                    |
| 97         | 515448730       | PIPE, OIL DRAIN                | 1           |                    |
| 98         | 515448740       | HOSE CLIP                      | 2           |                    |
| 99         | 515448750       | JOINT, DRAIN                   | 1           |                    |
| 100        | 515448760       | DRAIN PLUG                     | 1           |                    |
| 101        | 515448770       | SEAL WASHER                    | 2           |                    |
| 102        | 959026011       | TUBE 20D-300L                  | 1           |                    |
| 103        | 014208020       | BOLT 8X20 T .....              | 1           | REPLACES 001220820 |
| 104        | 030208200       | WASHER M8                      | 2           |                    |
| 105        | 955300420       | HORN (DC12V)                   | 1           |                    |

# MRH-800DS — ELECTRIC DEVICE

ELECTRIC DEVICE (YANMAR L100A) ASSY.



# MRH-800DS — ELECTRIC DEVICE

ELECTRIC DEVICE (YANMAR L100A) ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>            | <u>QTY.</u> | <u>REMARKS</u>     |
|------------|-----------------|-----------------------------|-------------|--------------------|
| 1          | 457333310       | KEY SWITCH                  | 1           | INCLUDES ITEMS W/* |
| 1A*        | 955000010       | KEY, PAIR                   | 1           |                    |
| 2          | 515449680       | WIRE HARNESS (L100)         | 1           |                    |
| 3          | 955300400       | BUZZER (EBL)                | 1           |                    |
| 4          | 515449860       | HARNESS (L1200)             | 1           |                    |
| 5          | 515448210       | ROD, BATTERY                | 2           |                    |
| 6          | 607010080       | COTTER PIN 6                | 2           |                    |
| 7          | 515447370       | HOLDER, BATTERY             | 1           |                    |
| 8          | 952404470       | WASHER M6 .....             | 2           | REPLACES 031106100 |
| 9          | 0037806000      | WING NUT M6 .....           | 2           | REPLACES 022410616 |
| 10         | 515447360       | BATTERY CORD (-)            | 1           |                    |
| 11         | 955300500       | TERMINAL COVER (+)          | 1           |                    |
| 12         | 955300510       | TERMINAL COVER (-)          | 1           |                    |
| 13         | 954404230       | CLAMP SA120-18              | 1           |                    |
| 14         | 959021812       | SPIRAL TUBE 6D-800L         | 1           |                    |
| 15         | 959021811       | SPIRAL TUBE 6D-400L         | 1           |                    |
| 16         | 507010110       | CLAMP TC-200                | 3           |                    |
| 17         | 506010070       | CLAMP TC-150                | 10          |                    |
| 18         | 601303150       | RUBBER PLATE 160-226-1T     | 1           |                    |
| 27         | 955405910       | MICRO-SWITCH                | 1           |                    |
| 28         | 955405450       | COVER, MICRO-SWITCH         | 1           |                    |
| 29         | 515449840       | READ CORD 550L (COM-ST)     | 1           |                    |
| 30         | 515449850       | READ CORD 550L (N,C-ST)     | 1           |                    |
| 31         | 515337110       | HOLDER, MICRO-SWITCH        | 1           |                    |
| 32         | 515449230       | PLATE, MICRO-SWITCH         | 1           |                    |
| 33         | 012210020       | BOLT 10X20 T .....          | 6           | REPLACES 001221020 |
| 34         | 031110160       | WASHER M10                  | 2           |                    |
| 35         | 030210250       | WASHER M10                  | 6           |                    |
| 36         | 001200430       | BOLT 4X30                   | 2           |                    |
| 37         | 031104080       | WASHER M4                   | 2           |                    |
| 38         | 022710405       | NYLON NUT M4                | 2           |                    |
| 46         | 0105050616      | BOLT 6X15 T .....           | 2           | REPLACES 001220615 |
| 47         | 030206150       | WASHER M6                   | 2           |                    |
| 48         | 952404470       | WASHER M6 .....             | 2           | REPLACES 031106100 |
| 49         | 515450380       | WIRE HARNESS                | 1           |                    |
| 52         | 516335040       | BASE BATTERY                | 1           |                    |
| 53         | 515448530       | BATTERY CORD (+) 1100L      | 1           |                    |
| 54         | 955300480       | BATTERY TERMINAL (+)        | 1           |                    |
| 55         | 955300490       | BATTERY TERMINAL (-)        | 1           |                    |
| 57         | 515448520       | LEAD CORD 50L               | 1           |                    |
| 70         | 515453230       | READ CORD (M-SWITCH) 550L-2 | 1           |                    |



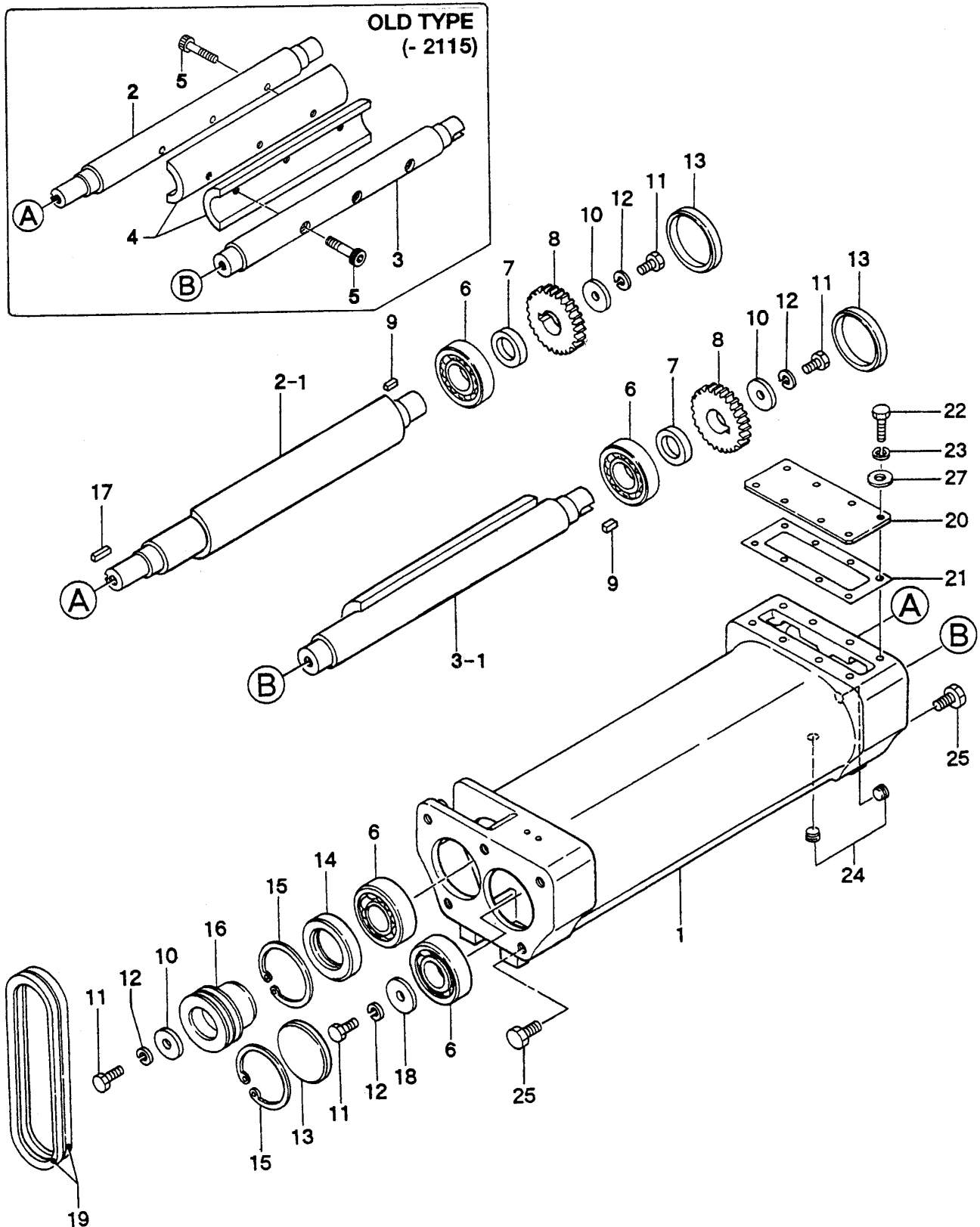
# MRH-800DS VIBRATION ROLLER — CLUTCH (VIBRATION) ASSY.

## CLUTCH (VIBRATION) ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>             | <u>QTY.</u> | <u>REMARKS</u>     |
|------------|-----------------|------------------------------|-------------|--------------------|
| A          | 515910010       | CLUTCH AY (VIB.) .....       | 1           | INCLUDES ITEMS W/* |
| 1*         | 515447070       | COUNTER PULLEY 130D-3V1      | 1           |                    |
| 2*         | 515212980       | COUNTER BRACKET              | 1           |                    |
| 3*         | 951403020       | KEY 7X7X26                   | 1           |                    |
| 4*         | 043006206       | BEARING 6206V                | 2           |                    |
| 5*         | 080100620       | STOP RING R-62               | 3           |                    |
| 6*         | 952402470       | WASHER 11366                 | 2           |                    |
| 7*         | 012010030       | BOLT 10X30 T .....           | 2           | REPLACES 001221030 |
| 8*         | 030210250       | WASHER M10                   | 8           |                    |
| 9*         | 509434770       | CLUTCH SPRING                | 1           |                    |
| 10*        | 509434780       | RELEASE COLLAR 62X78X40      | 1           |                    |
| 11*        | 044006008       | BEARING 6008VV               | 1           |                    |
| 12*        | 080100680       | STOP RING R-68               | 1           |                    |
| 13*        | 080200400       | STOP RING S-40               | 1           |                    |
| 14*        | 515447080       | PRESSURE PLATE               | 1           |                    |
| 15*        | 515447090       | INSIDE PLATE                 | 1           |                    |
| 16*        | 515447100       | DISC PLATE                   | 1           |                    |
| 17*        | 044006305       | BEARING 6305VV               | 1           |                    |
| 18*        | 012210020       | BOLT 10X20 T .....           | 2           | REPLACES 001221020 |
| 19*        | 509324690       | RELEASE FORK                 | 2           |                    |
| 20*        | 509434850       | STUD BAR 18D X80L            | 1           |                    |
| 21*        | 509434860       | LOCK, WIRE                   | 1           |                    |
| 22*        | 952401690       | WASHER 7173                  | 4           |                    |
| 23*        | 010505506       | BOLT 6X15 T .....            | 6           | REPLACES 001220615 |
| 24*        | 030206150       | WASHER M6                    | 6           |                    |
| 25*        | 509434870       | FORK PIN                     | 2           |                    |
| 26*        | 509434880       | COLLAR, FORK PIN 12.5X20X5   | 2           |                    |
| 27*        | 515334200       | COUNTER SHAFT                | 1           |                    |
| 28*        | 515334210       | CLUTCH PULLEY 113D-A2        | 1           |                    |
| 29*        | 409434840       | BRACKET, RELEASE FORK        | 1           |                    |
| 30*        | 012010030       | BOLT 10X30 T .....           | 4           | REPLACES 001221030 |
| 31*        | 505015060       | GREASE FITTING A-PT1/8 ..... | 1           | REPLACES 301010100 |

# MRH-800DS VIBRATION ROLLER — VIBRATOR ASSY.

VIBRATOR ASSY.





# MRH-800DS VIBRATION ROLLER — VIBRATOR ASSY.

## VIBRATOR ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>               | <u>QTY.</u> | <u>REMARKS</u>     |
|------------|-----------------|--------------------------------|-------------|--------------------|
| 1          | 515113090       | VIBRATING CASE                 | 1           |                    |
| 2          | 515334110       | ROTARY SHAFT, DRIVE .....      | 1           | - 215 #2           |
| 2-1        | 515334111       | ROTARY SHAFT, DRIVE .....      | 1           | F2116- *2          |
| 3          | 515334120       | ROTARY SHAFT, DRIVEN .....     | 1           | - 2115 #2          |
| 3-1        | 515334121       | ROTARY SHAFT, DRIVEN .....     | 1           | F2116-*2           |
| 4          | 515334130       | ECCENTRIC ROTATOR .....        | 2           | - 2115 #2          |
| 5          | 001521252       | SOCKET HEAD BOLT 12X60 T ..... | 6           | - 2115 #2          |
| 6          | 040406308       | BEARING 6308C4                 | 4           |                    |
| 7          | 501011020       | GEAR SPACER                    | 2           |                    |
| 8          | 501011000       | GEAR 38                        | 2           |                    |
| 9          | 951400080       | KEY 10X8X17 .....              | 2           | REPLACES 951400081 |
| 10         | 952400900       | WASHER 13446                   | 3           |                    |
| 11         | 012212030       | BOLT 12X30 T .....             | 4           | REPLACES 001221230 |
| 12         | 030212300       | WASHER M12                     | 4           |                    |
| 13         | 953405570       | SEAL CAP SC- 90-10             | 3           |                    |
| 14         | 060206020       | OIL SEAL SC- 659013            | 1           |                    |
| 15         | 080100900       | STOP RING R-90                 | 2           |                    |
| 16         | 515447040       | PULLEY 86D-A2                  | 1           |                    |
| 17         | 951400090       | KEY 10X8X33                    | 1           |                    |
| 18         | 952401590       | WASHER 13X50X6                 | 1           |                    |
| 19         | 070100381       | V-BELT A- 38 RED               | 2           |                    |
| 20         | 515334140       | COVER, GEAR                    | 1           |                    |
| 21         | 515334150       | PACKING, COVER                 | 1           |                    |
| 22         | 014208020       | BOLT 8X20 T .....              | 8           | REPLACES 001220820 |
| 23         | 030208200       | WASHER M8                      | 8           |                    |
| 24         | 894230          | PLUG PT1/4 .....               | 2           | REPLACES 505015380 |
| 25         | 001221430       | BOLT 14X30 T                   | 10          |                    |
| 25         | 001221425       | BOLT 14X25 T .....             | 10          | F2116-             |
| 27         | 031108160       | WASHER M8                      | 8           |                    |



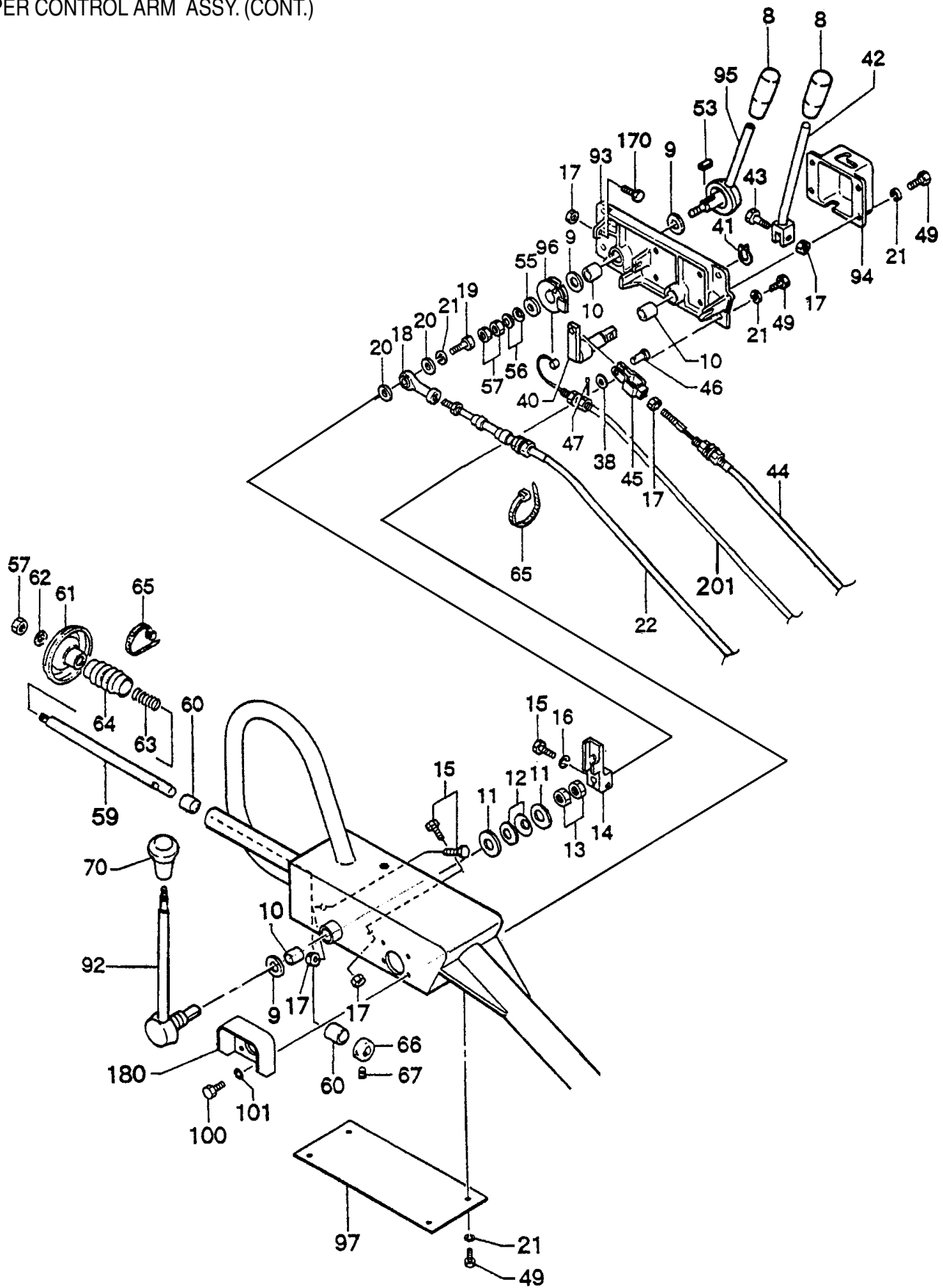
# MRH-800DS VIBRATION ROLLER — UPPER CONTROL ARM ASSY.

## UPPER CONTROL ARM ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>          | <u>QTY.</u> | <u>REMARKS</u>     |
|------------|-----------------|---------------------------|-------------|--------------------|
| 8          | 959403840       | BAR GRIP, I.D. 12MM       | 2           |                    |
| 9          | 953402930       | COPPER PACKING 19X30X1    | 3           |                    |
| 10         | 509010130       | BUSHING MB1825DU          | 3           |                    |
| 11         | 952405700       | WASHER 19X49X0.6          | 2           |                    |
| 12         | 952403690       | CONICAL SPRING WASHER M18 | 2           |                    |
| 13         | 020418110       | NUT M18, H=11             | 2           |                    |
| 14         | 515447410       | LEVER JOINT, TRAVELLING   | 1           |                    |
| 15         | 011208030       | BOLT 8X30 T .....         | 3           | REPLACES 001220830 |
| 16         | 030208200       | WASHER, LOCK M8           | 3           |                    |
| 17         | 02108060        | NUT M8 .....              | 5           | REPLACES 020308060 |
| 18         | 501011162       | ROD END PR6-209           | 2           |                    |
| 19         | 011206020       | BOLT 6X20 T .....         | 1           | REPLACES 001220620 |
| 20         | 952404470       | WASHER 6.5X15X1.6         | 4           |                    |
| 21         | 030206150       | WASHER, LOCK M6           | 14          |                    |
| 22         | 515334230       | CABLE AY 33050E1700       | 1           |                    |
| 40         | 509326970       | SHAFT, LEVER              | 1           |                    |
| 41         | 080200180       | STOP RING S-18            | 1           |                    |
| 42         | 509436911       | LEVER, VIB.               | 1           |                    |
| 43         | 011208035       | BOLT 8X35 T .....         | 1           | REPLACES 001220835 |
| 44         | 515334240       | CABLE ASSY., VIBRATION    | 1           |                    |
| 45         | 959404760       | CLEVIS 8D X44             | 1           |                    |
| 46         | 959404370       | PIN 8X22                  | 1           |                    |
| 47         | 025910080       | SNAP PIN /SSP-8           | 1           |                    |
| 49         | 0105050616      | BOLT 6X15 T .....         | 12          | REPLACES 001220615 |

# MRH-800DS VIBRATION ROLLER — UPPER CONTROL ARM ASSY. (CONT.)

UPPER CONTROL ARM ASSY. (CONT.)



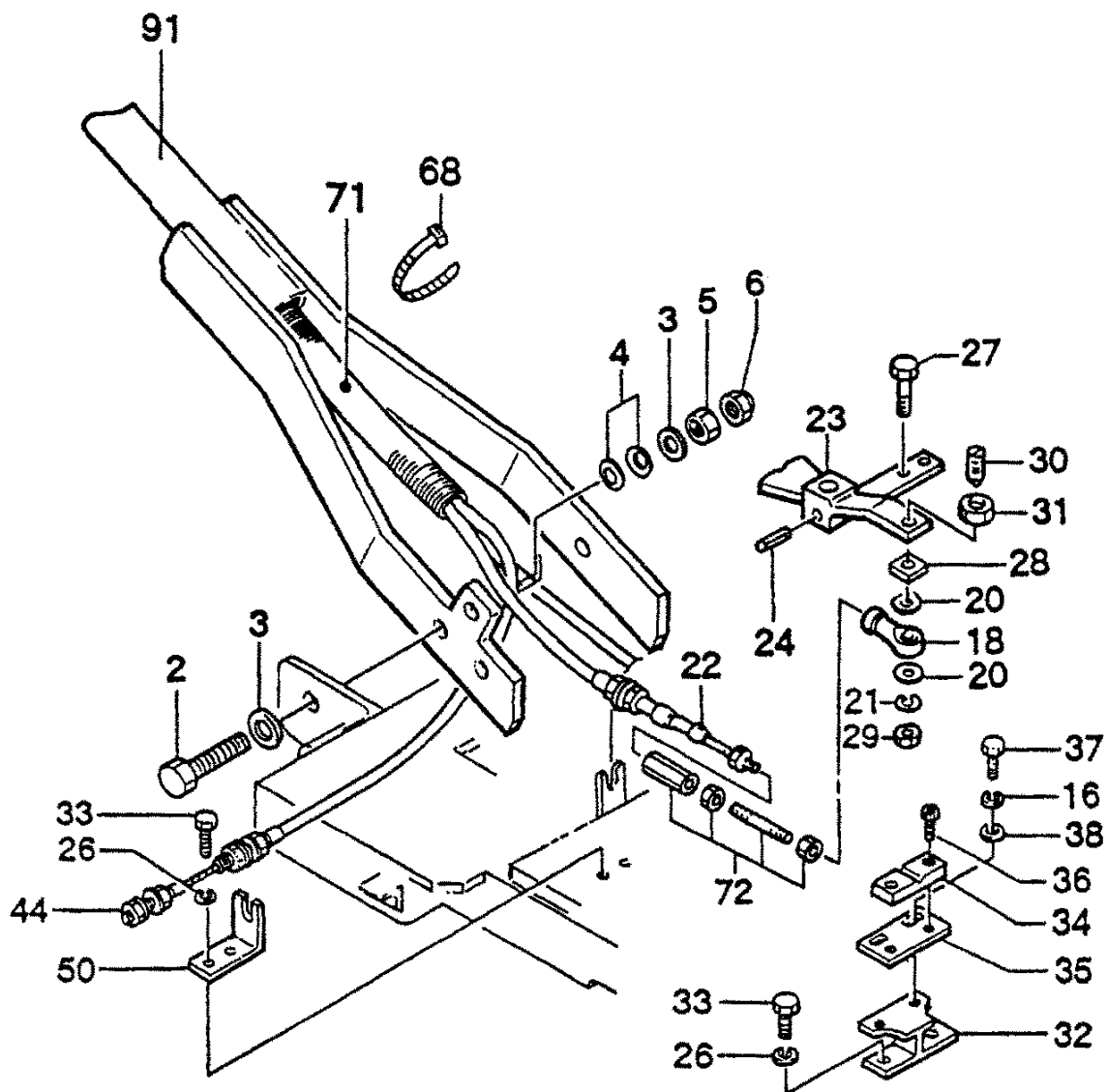
# MRH-800DS VIBRATION ROLLER — UPPER CONTROL ARM ASSY. (CONT.)

## UPPER CONTROL ARM ASSY. (CONT.)

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>              | <u>QTY.</u> | <u>REMARKS</u>              |
|------------|-----------------|-------------------------------|-------------|-----------------------------|
| 53         | 951401431       | KEY 5X5X8                     | 1           |                             |
| 55         | 952404790       | WASHER 13306                  | 1           |                             |
| 56         | 032212250       | CONICAL SPRING WASHER M12     | 2           |                             |
| 57         | 0039312000      | NUT M12 .....                 | 3           | REPLACES 020312100          |
| 59         | 515334820       | ROD                           | 1           |                             |
| 60         | 509010140       | BUSHING MB1625DU              | 2           |                             |
| 61         | 515447720       | DISC PLATE, DEAD-MAN          | 1           |                             |
| 62         | 030212300       | WASHER, LOCK M12              | 1           |                             |
| 63         | 509436980       | SPRING, DEAD-MAN              | 1           |                             |
| 64         | 509436990       | PROTECTOR, DEAD-MAN           | 1           |                             |
| 65         | 507010110       | CLAMP TC-200                  | 2           |                             |
| 66         | 509436960       | ROD STOPPER, DEAD-MAN         | 1           |                             |
| 67         | 014206010       | SOCKET HEAD SCREW 6X6 T ..... | 2           | REPLACES 099206006          |
| 70         | 959405920       | KNOB 44D-78L                  | 1           |                             |
| 92         | 515336490       | TRAVELLING LEVER 260L         | 1           |                             |
| 93         | 515212950       | LEVER SUPPORT, VIB. E/G       | 1           |                             |
| 94         | 515334460       | LEVER COVER, VIB.             | 1           |                             |
| 95         | 515336500       | LEVER, E/G 133L               | 1           |                             |
| 96         | 509326320       | GUIDE, WIRE (E/G)             | 1           |                             |
| 97         | 509436950       | COVER, HANDLE BOX             | 1           |                             |
| 100        | 011006010       | BOLT 6X10 T .....             | 4           | REPLACES 001220610          |
| 101        | 030206150       | WASHER, LOCK M6               | 4           |                             |
| 170        | 011208030       | BOLT 8X30 T .....             | 1           | REPLACES 001220830 FOR L100 |
| 180        | 517338590       | COVER (FOR KEY SWITCH)        | 1           |                             |
| 201        | 956100022       | THROTTLE WIRE .....           | 1           |                             |

# MRH-800DS VIBRATION ROLLER — LOWER CONTROL ARM ASSY.

LOWER CONTROL ARM ASSY.



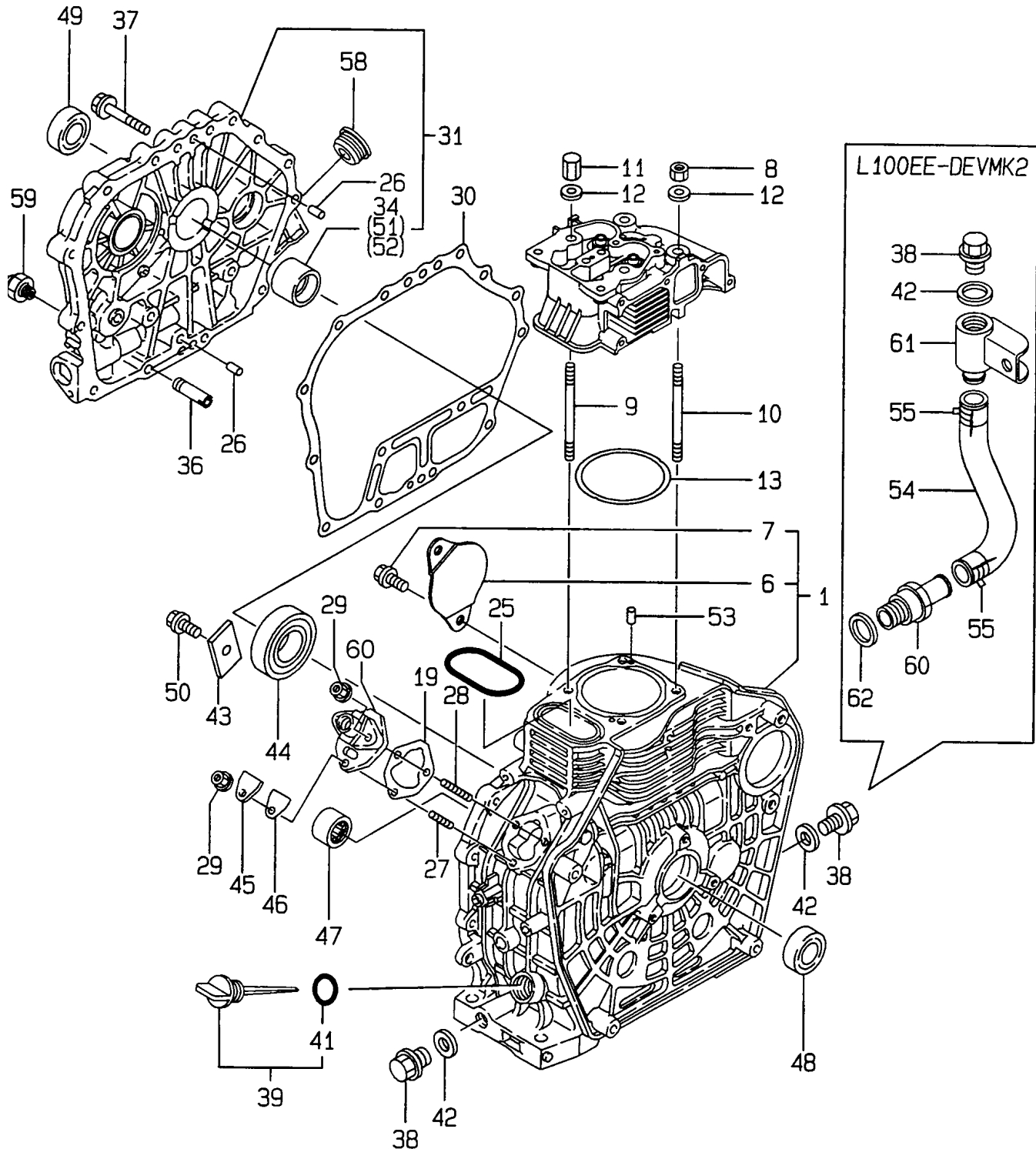
# MRH-800DS VIBRATION ROLLER — LOWER CONTROL ARM ASSY.

## LOWER CONTROL ARM ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u>              | <u>QTY.</u> | <u>REMARKS</u>     |
|------------|-----------------|-------------------------------|-------------|--------------------|
| 2          | 001222055       | BOLT 20X75 T                  | 2           |                    |
| 3          | 031120320       | WASHER, FLAT M20              | 1           |                    |
| 4          | 032220450       | CONICAL SPRING WASHER M20     | 4           |                    |
| 5          | 020320160       | NUT M20                       | 2           |                    |
| 6          | 022522017       | LOCK NUT U-M20                | 2           |                    |
| 16         | 030208200       | WASHER, LOCK M8               | 3           |                    |
| 18         | 501011162       | ROD END PR6-209               | 2           |                    |
| 20         | 952404470       | WASHER 6.5X15X1.6             | 4           |                    |
| 21         | 030206150       | WASHER, LOCK M6               | 14          |                    |
| 22         | 515334230       | CABLE AY 33050E1700           | 1           |                    |
| 23         | 515335780       | LEVER (PV10), E- START        | 1           |                    |
| 24         | 025406032       | SPRING PIN 6X32               | 1           |                    |
| 26         | 030210250       | WASHER, LOCK M10              | 4           |                    |
| 27         | 001220635       | BOLT 6X35 T                   | 1           |                    |
| 28         | 515450560       | SPACER (PV10)                 | 1           |                    |
| 29         | 022710607       | NYLON NUT M6                  | 1           |                    |
| 30         | 505015150       | SPRING PLUNGER                | 1           |                    |
| 31         | 020116130       | NUT M16, H=10 .....           | 1           | REPLACES 020416100 |
| 32         | 509321160       | GUIDE HOLDER                  | 1           |                    |
| 33         | 012210020       | BOLT 10X20 T .....            | 4           | REPLACES 00122120  |
| 34         | 515448170       | GUIDE                         | 1           |                    |
| 35         | 515448180       | SLIDE PLATE                   | 1           |                    |
| 36         | 014206015       | SOCKET HEAD BOLT 6X15 T ..... | 2           | REPLACES 001520615 |
| 37         | 011008015       | BOLT 8X15 T .....             | 2           | REPLACES 001220815 |
| 38         | 031108160       | WASHER, FLAT M8               | 3           |                    |
| 44         | 515334240       | CABLE AY (VIB.)               | 1           |                    |
| 50         | 515447180       | CABLE SUPPORT, VIB.           | 1           |                    |
| 68         | 506010070       | CLAMP TC-150                  | 8           |                    |
| 71         | 959021911       | TUBE 25D-850L                 | 1           |                    |
| 72         | 501910010       | TURN BUCKLE ASS'Y.            | 1           |                    |
| 91         | 515115910       | HANDLE                        | 1           |                    |

# YANMAR L100EE DEVMK2 — CYLINDER BLOCK ASSY.

CYLINDER BLOCK ASSY.





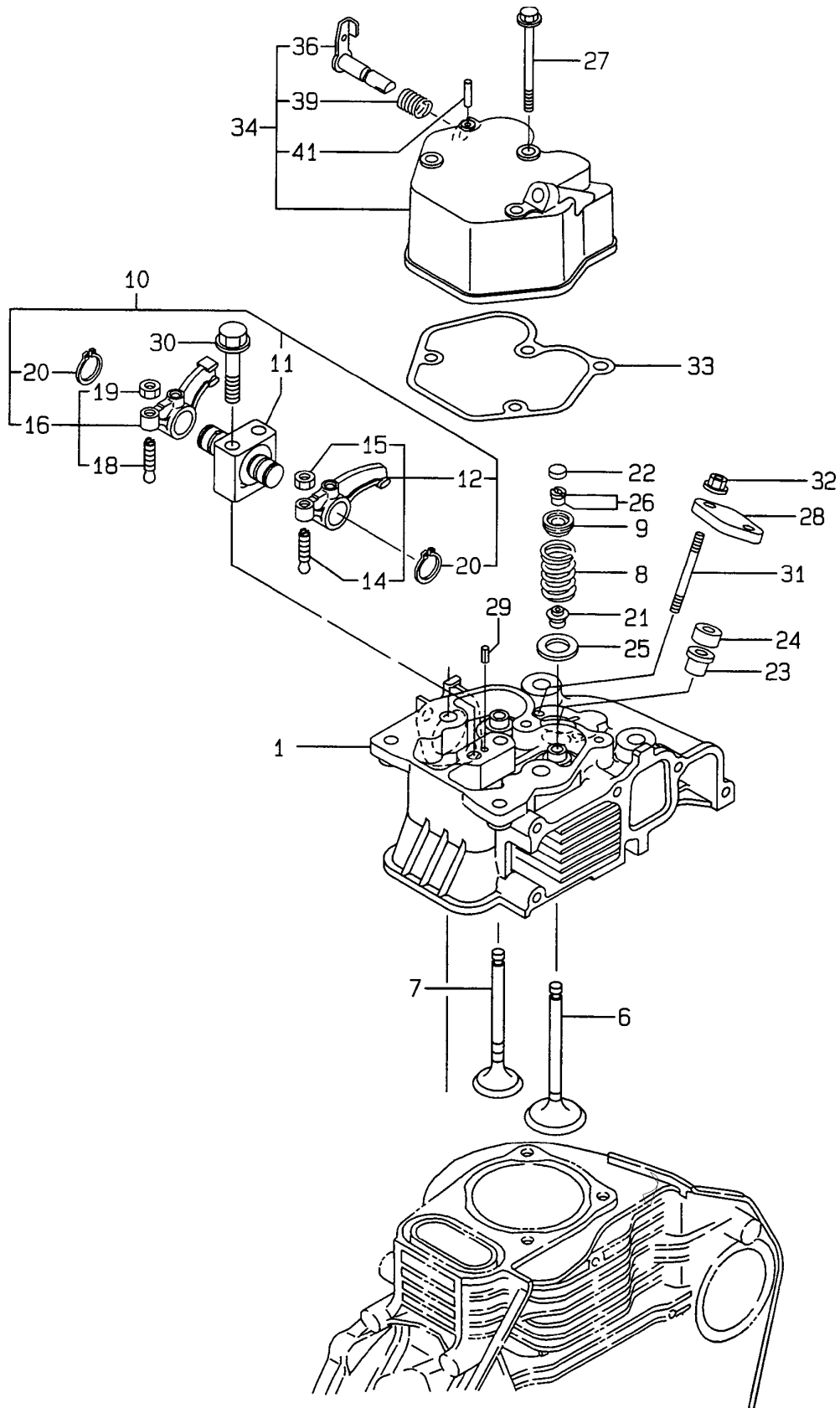
# YANMAR L100EE DEVMK2 — CYLINDER BLOCK ASSY.

## CYLINDER BLOCK ASSY.

| <b>NO</b> | <b>PART NO</b> | <b>PART NAME</b>           | <b>QTY.</b> | <b>REMARKS</b>     |
|-----------|----------------|----------------------------|-------------|--------------------|
| 1         | 71497001560    | BLOCK ASSY. CYLINDER ..... | 1           | INCLUDES ITEMS W/* |
| 6*        | 11435001700    | COVER, STARTER             | 1           |                    |
| 7*        | 26106100122    | BOLT M10X 12 PLATED        | 2           |                    |
| 8         | 10502501220    | NUT 10                     | 2           |                    |
| 9         | 11465001230    | STUD, CYLINDER HEAD        | 2           |                    |
| 10        | 11465001240    | STUD, CYLINDER HEAD        | 2           |                    |
| 11        | 11465001250    | NUT 10                     | 2           |                    |
| 12        | 11465001260    | WASHER                     | 4           |                    |
| 13        | 11465101330    | GASKET, CYLINDER HEAD CMP  | 1           |                    |
| 19        | 11425001800    | SHIM SET                   | 1           |                    |
| 25        | 11465001380    | O-RING                     | 1           |                    |
| 26        | 11427001600    | PARALLEL PIN 8 X 12        | 2           |                    |
| 27        | 26226060182    | STUD M 6 X 18 PLATED       | 1           |                    |
| 28        | 26226060222    | STUD M 6 X 22 PLATED       | 2           |                    |
| 29        | 26366060002    | NUT M 6                    | 3           |                    |
| 30        | 11465001412    | GASKET CRANKCASE           | 1           |                    |
| 31        | 11466001471    | COVER D, CRANKCASE .....   | 1           | INCLUDES ITEMS W/+ |
| 34+       | 11465002100    | BEARING, MAIN              | 1           |                    |
| 36        | 11425035150    | PIPE, L.O. INLET           | 1           |                    |
| 37        | 26106080352    | BOLT M 8 X 35 PLATED       | 16          |                    |
| 38        | 10542501690    | PLUG M16                   | 2           |                    |
| 39        | 11469901760    | CAP, W/LUB.OIL GAUGE ..... | 1           | INCLUDES ITEMS W/# |
| 41#       | 11429901950    | O-RING                     | 1           |                    |
| 42        | 22190160002    | SEAL WASHER 16S            | 2           |                    |
| 43        | 11429902030    | RETAINER                   | 1           |                    |
| 44        | 11465002150    | BALL BEARING               | 1           |                    |
| 45        | 11425001830    | COVER, INSPEC. WINDOW      | 1           |                    |
| 46        | 11425001841    | GASKET                     | 1           |                    |
| 47        | 24162152112    | NEEDLE BEARING             | 1           |                    |
| 48        | 24423355008    | SEAL, OIL                  | 1           |                    |
| 49        | 22423355008    | SEAL, OIL                  | 1           |                    |
| 50        | 26106080122    | BOLT M 8 X 12 PLATED       | 1           |                    |
| 51        | 11465002200    | MAIN BEARING US = 0.25     | 1           |                    |
| 52        | 11465002210    | MAIN BEARING US = 0.50     | 1           |                    |
| 53        | 22312040080    | PIN 4 X 8 STRAIGHT         | 2           |                    |
| 54        | 11498401940    | PIPE                       | 1           |                    |
| 55        | 23000019000    | CLAMP 19                   | 2           |                    |
| 58        | 16011001870    | PLUG, RUBBER W/SCREW       | 1           |                    |
| 59        | 12125239450    | SENDER, OIL PRESSURE       | 1           |                    |
| 60        | 11498508350    | NIPPLE, DRAIN              | 1           |                    |
| 61        | 11435239400    | JOINT, DRAIN               | 1           |                    |
| 62        | 22190160002    | SEAL WASHER 16S            | 1           |                    |

# YANMAR L100EE DEVMK2 — CYLINDER HEAD AND COVER ASSY.

CYLINDER HEAD AND BONNET ASSY.



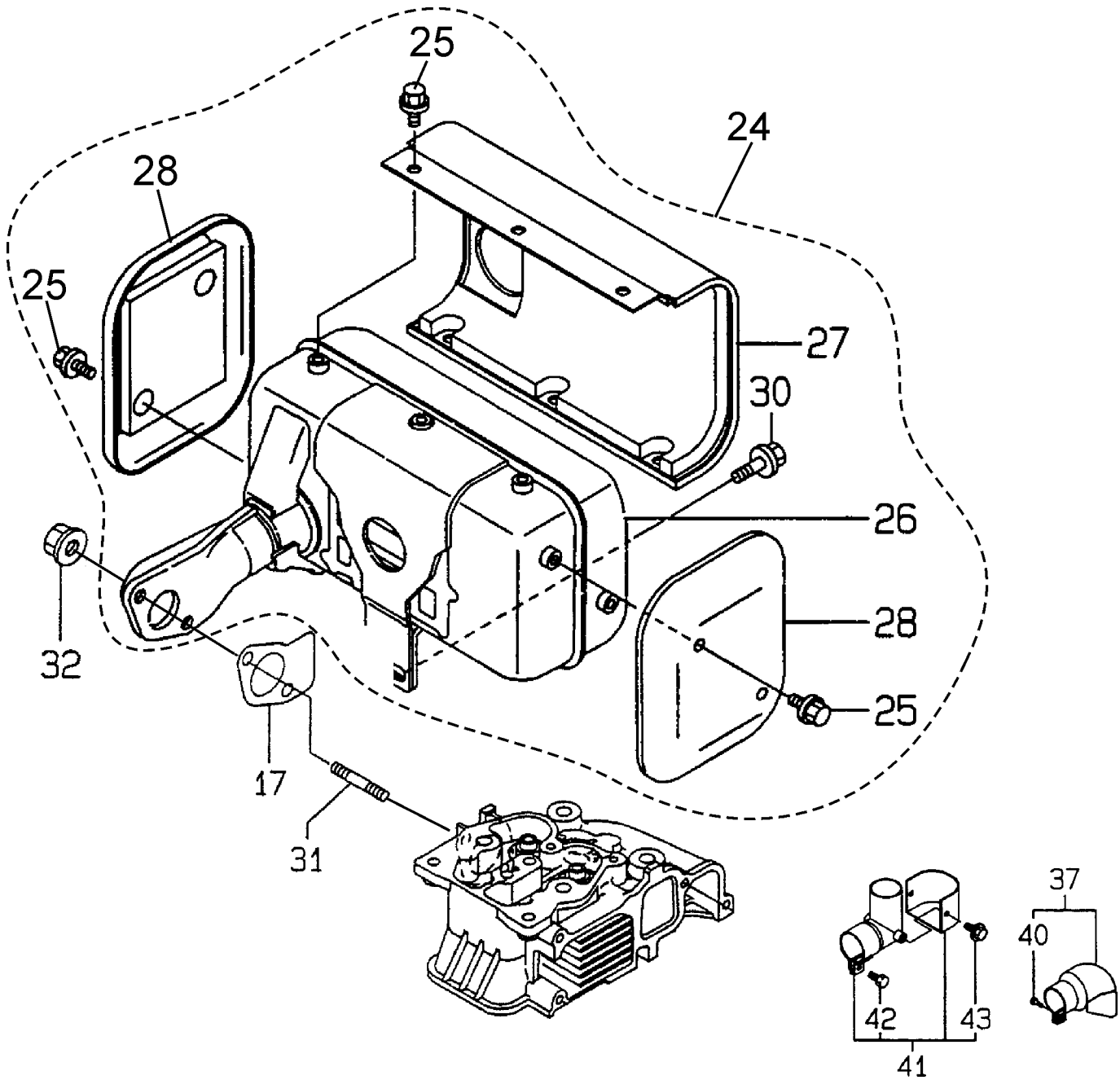
# YANMAR L100EE DEVMK2— CYLINDER HEAD AND COVER ASSY.

## CYLINDER HEAD AND COVER ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u>      | <u>QTY.</u> | <u>REMARKS</u>     |
|-----------|----------------|-----------------------|-------------|--------------------|
| 1         | 11465111020    | CYLINDER HEAD         | 1           |                    |
| 6         | 11465111100    | VALVE, SUCTION        | 1           |                    |
| 7         | 11465111110    | VALVE, EXHAUST        | 1           |                    |
| 8         | 11465011121    | SPRING, VALVE         | 2           |                    |
| 9         | 11962011180    | RETAINER, SPRING      | 2           |                    |
| 10        | 11465111250    | SUPPORT CMP, ARM..... | 1           | INCLUDES ITEMS W/* |
| 11*       | 11465111260    | SUPPORT, ROCKER ARM   | 1           |                    |
| 12*       | 11465111650    | ARM ASSY. INTAKE      | 1           |                    |
| 14*       | 11425011240    | SCREW, VALVE ADJUST   | 1           |                    |
| 15*       | 26856060002    | LOCK NUT 6            | 1           |                    |
| 16*       | 11465111660    | ARM ASSY., EXHAUST    | 1           |                    |
| 18+       | 11425011240    | SCREW, VALVE ADJUST   | 1           | INCLUDES ITEMS W/+ |
| 19+       | 26856060002    | LOCK NUT 6            | 1           |                    |
| 20*       | 22242000150    | CIRCLIP 15            | 2           |                    |
| 21        | 11465011340    | SEAL, VALVE STEM      | 2           |                    |
| 22        | 10421111370    | CAP, VALVE            | 2           |                    |
| 23        | 11477111461    | GASKET, NOZZLE        | 1           |                    |
| 24        | 11477111470    | SPACER, NOZZLE        | 1           |                    |
| 25        | 11465011600    | WASHER                | 2           |                    |
| 26        | 27310070000    | COTTER 7              | 4           |                    |
| 27        | 26106060702    | BOLT M 6 X 70 PLATED  | 3           |                    |
| 28        | 11425011901    | RETAINER              | 1           |                    |
| 29        | 22351040008    | SPRING PIN 4 X 8      | 1           |                    |
| 30        | 26106080552    | BOLT M 8 X 55 PLATED  | 2           |                    |
| 31        | 26226060552    | STUD M 6 X 55 PLATED  | 2           |                    |
| 32        | 26366060002    | NUT M 6               | 2           |                    |
| 33        | 11465111310    | GASKET, BONNET        | 1           |                    |
| 34        | 11465111950    | COVER ASSY. HEAD..... | 1           | INCLUDES ITEMS W/# |
| 36#       | 11425003591    | SHAFT ASSY., DECOMP.  | 1           |                    |
| 39#       | 11425003640    | SPRING                | 1           |                    |
| 41#       | 22312030160    | PARALLEL PIN 3 X 16   | 1           |                    |

# YANMAR L100EE-DEVK2— MUFFLER ASSY.

MUFFLER ASSY.



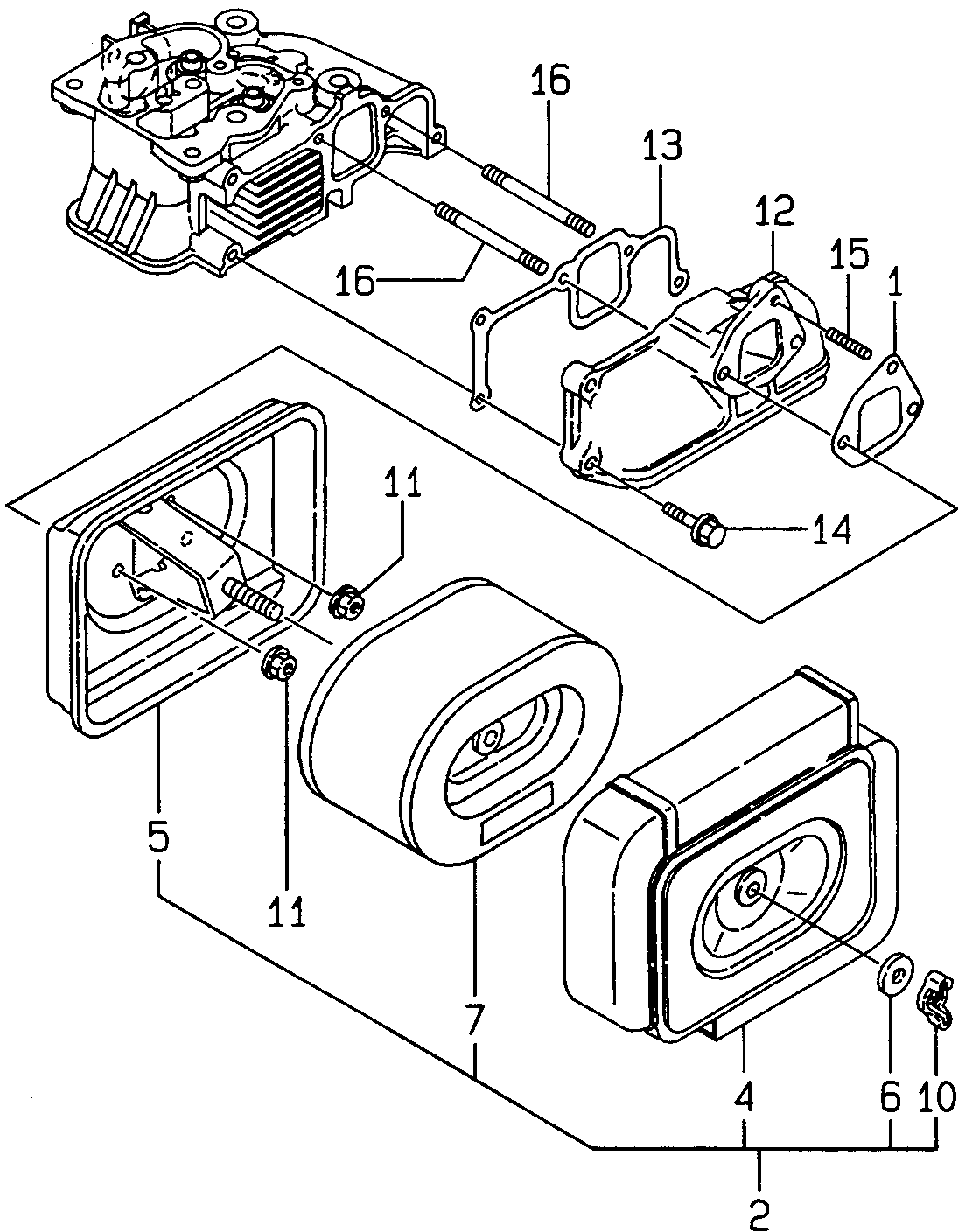
# YANMAR L100EE-DEVMK2— MUFFLER ASSY.

MUFFLER ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u>          | <u>QTY.</u> | <u>REMARKS</u>     |
|-----------|----------------|---------------------------|-------------|--------------------|
| 17        | 11465013201    | GASKET, NON-ASB.          | 1           |                    |
| 24        | 11497013551    | MUFFLER ASSY. ....        | 1           | INCLUDES ITEMS W/* |
| 25*       | 16026001580    | BOLT M 6 X 6              | 10          |                    |
| 26*       | 11497013561    | MUFFLER                   | 1           |                    |
| 27*       | 11497013700    | COVER A, MUFFLER          | 1           |                    |
| 28*       | 11497013710    | COVER, MUFFLER            | 2           |                    |
| 30*       | 26106080182    | BOLT, M 8 X 16 PLATED     | 2           |                    |
| 31        | 26216080182    | STUD, M 8 X 18 PLATED     | 2           |                    |
| 32        | 26366080002    | NUT, M 8                  | 2           |                    |
| 37        | 10519813621    | EXTENTION, SILENCER ..... | 1           | INCLUDES ITEM W/#  |
| 40#       | 10509813990    | BOLT                      | 1           |                    |
| 41        | 11498513701    | PIPE, SILENCER .....      | 1           | INCLUDES ITEMS W/+ |
| 42+       | 10509813990    | BOLT                      | 1           |                    |
| 43+       | 26113060082    | BOLT, M 6 X8              | 2           |                    |

# YANMAR L100EE-DEVMK2— AIR CLEANER ASSY.

AIR CLEANER ASSY.



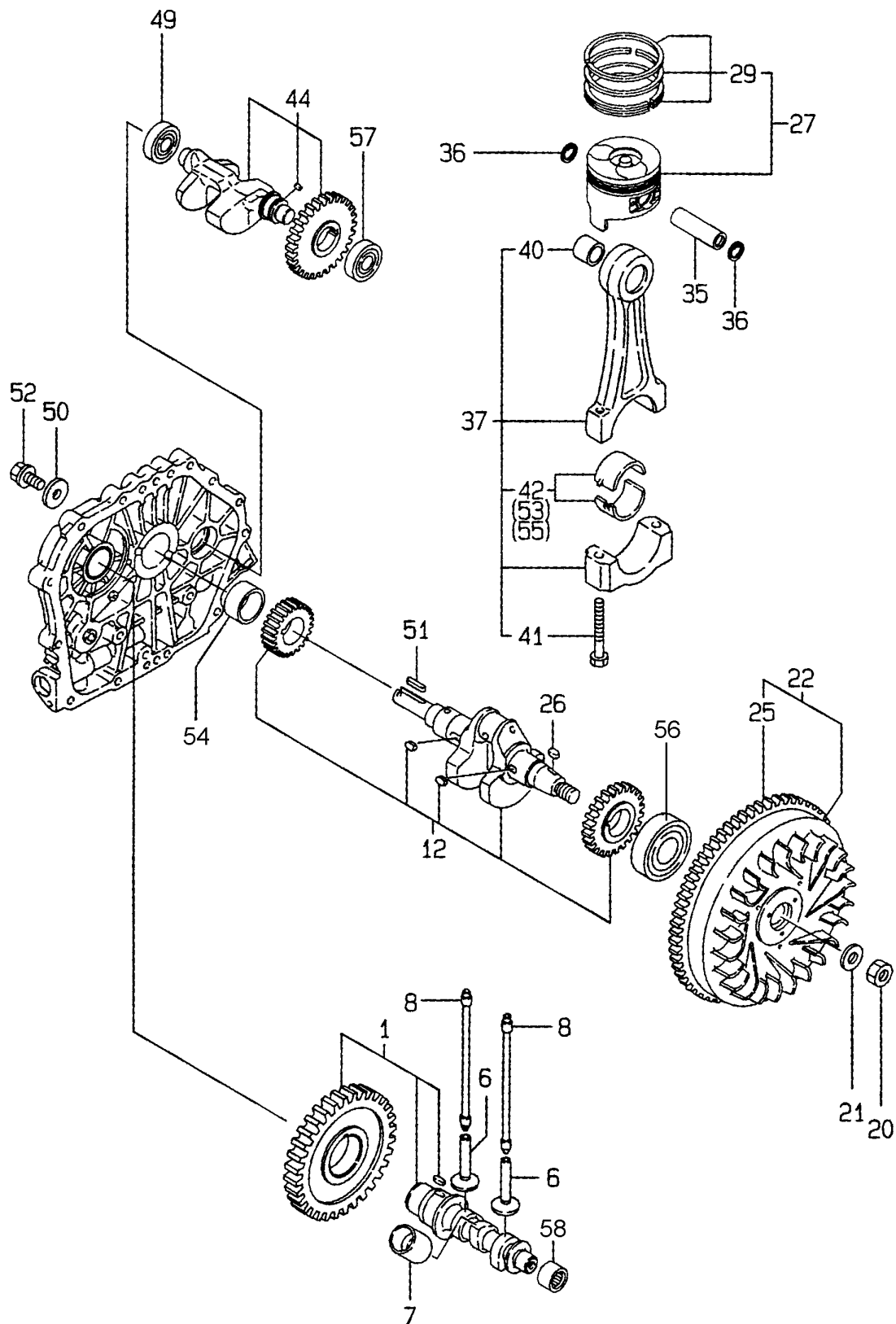
# YANMAR L100EE-DEV MK2— AIR CLEANER ASSY.

## AIR CLEANER ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u>        | <u>QTY.</u> | <u>REMARKS</u>     |
|-----------|----------------|-------------------------|-------------|--------------------|
| 1         | 11465012211    | GASKET, AIR CLEANER     | 1           |                    |
| 2         | 71465012560    | CLEANER ASSY. AIR ..... | 1           | INCLUDES ITEMS W/* |
| 4*        | 11465012520    | COVER, AIR CLEANER      | 1           |                    |
| 5*        | 11465012530    | CASE, AIR CLEANER       | 1           |                    |
| 6*        | 11425212560    | WASHER M 8, SEAL        | 1           |                    |
| 7*        | 11465012590    | ELEMENT W/PRE-FILTER    | 1           |                    |
| 10*       | 11425212550    | WING, NUT M 8           | 1           |                    |
| 11        | 11425012300    | U- NUT                  | 3           |                    |
| 12        | 11469912020    | PIPE, AIR INTAKE        | 1           |                    |
| 13        | 11465012301    | GASKET, AIR INTAKE      | 1           |                    |
| 14        | 26106060252    | BOLT M 6 X 25 PLATED    | 3           |                    |
| 15        | 26226060142    | STUD M 6 X 14 PLATED    | 1           |                    |
| 16        | 26226060752    | STUD M 6 X 75           | 2           |                    |

# YANMAR — CRANKSHAFT, PISTON AND CAMSHAFT ASSY.

CRANKSHAFT, PISTON AND CAMSHAFT ASSY.





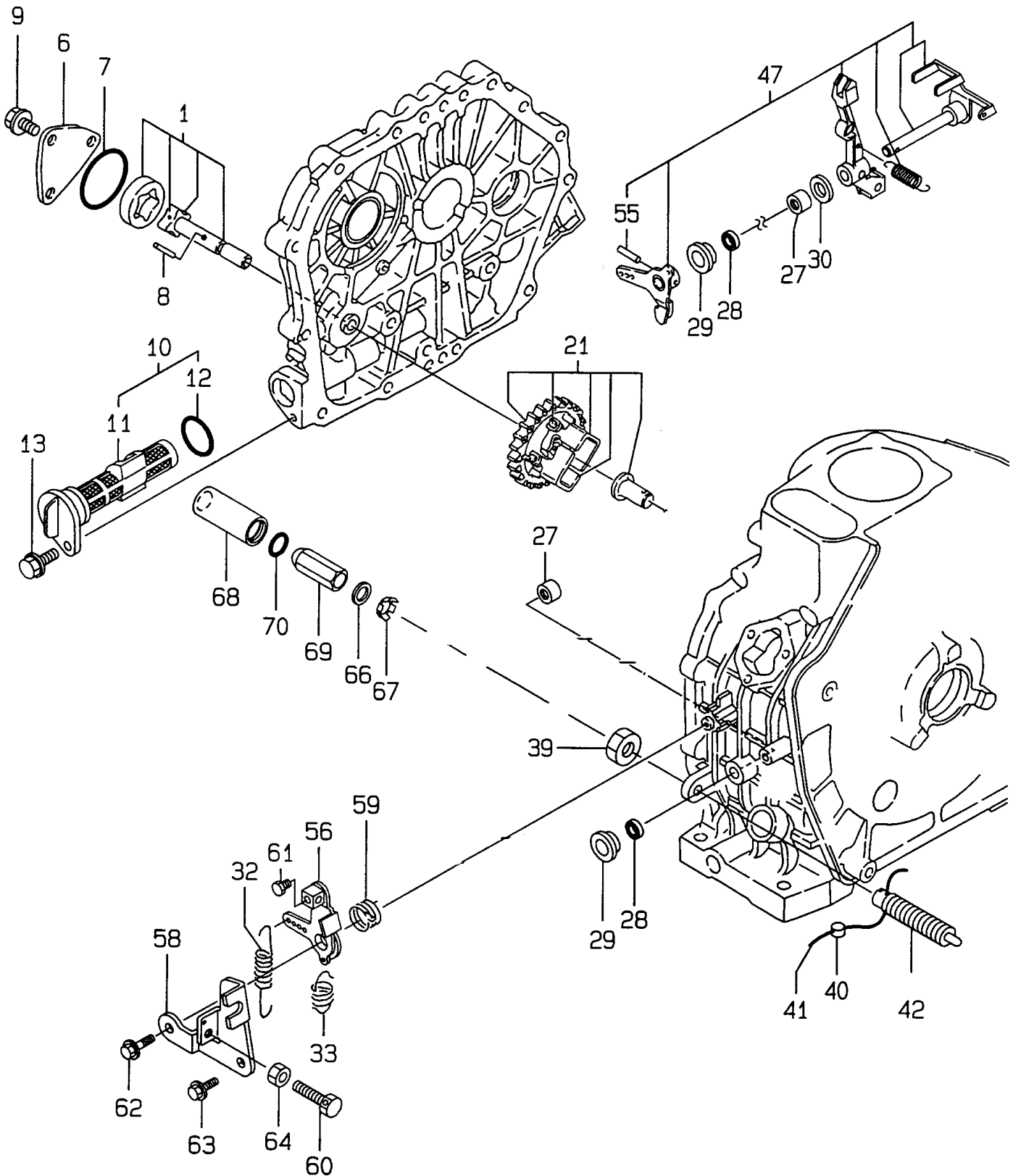
# YANMAR — CRANKSHAFT, PISTON AND CAMSHAFT ASSY.

## CRANKSHAFT, PISTON AND CAMSHAFT ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u>             | <u>QTY.</u> | <u>REMARKS</u>      |
|-----------|----------------|------------------------------|-------------|---------------------|
| 1         | 71466014100    | CAMSHAFT ASSY., D            | 1           |                     |
| 6         | 11465014200    | TAPPET                       | 2           |                     |
| 7         | 11477114260    | TAPPET, F.O.                 | 1           |                     |
| 8         | 11465014401    | ROD, PUSH                    | 2           |                     |
| 12        | 71465421730    | CRANKSHAFT ASSY.             | 1           |                     |
| 20        | 12271001220    | NUT, M18                     | 1           |                     |
| 21        | 11465021551    | WASHER, FLYWHEEL             | 1           |                     |
| 22        | 11466221593    | FLYWHEEL, DEJ., W/GEAR ..... | 1           | INCLUDES ITEMS W/ # |
| 25 #      | 11466221601    | GEAR, RING                   | 1           |                     |
| 26        | 22512050140    | KEY, 5 X 14                  | 1           |                     |
| 27        | 71465222720    | PISTON, W/RINGS .....        | 1           | INCLUDES ITEMS W/*  |
| 29*       | 71497022500    | RING SET, PISTON             | 1           |                     |
| 35        | 11469922300    | PIN, PISTON D=23             | 1           |                     |
| 36        | 12979222400    | CIRCLIP 23                   | 2           |                     |
| 37        | 71465023100    | ROD ASSY., CONNECTING .....  | 1           | INCLUDES ITEMS W/%  |
| 40%       | 12406023100    | BUSH, PISTON PIN             | 1           |                     |
| 41%       | 10530023200    | BOLT, ROD                    | 2           |                     |
| 42%       | 71465023600    | BEARING, CRANKPIN            | 1           |                     |
| 44        | 71497028100    | SHAFT ASSY., BALANCER        | 1           |                     |
| 49        | 24101062034    | BALL BEARING                 | 1           |                     |
| 50        | 16031014550    | WASHER                       | 1           |                     |
| 51        | 22512070360    | KEY 7 X 36                   | 1           |                     |
| 52        | 26106080202    | BOLT M 8 X 20 PLATED         | 1           |                     |
| 53        | 71465023610    | BEARING, CRANKPIN U.S=0.25   | 1           |                     |
| 54        | 11465002100    | BEARING, MAIN                | 1           |                     |
| 55        | 71465023620    | BEARING, CRANKPIN U.S=0.50   | 1           |                     |
| 56        | 11465002150    | BALL BEARING                 | 1           |                     |
| 57        | 24101063034    | BALL BEARING                 | 1           |                     |
| 58        | 24162152112    | NEEDLE BEARING               | 1           |                     |

# YANMAR L100EE-DEVK2— LUB. OIL PUMP AND GOVERNOR ASSY.

LUB. OIL PUMP AND GOVERNOR ASSY.



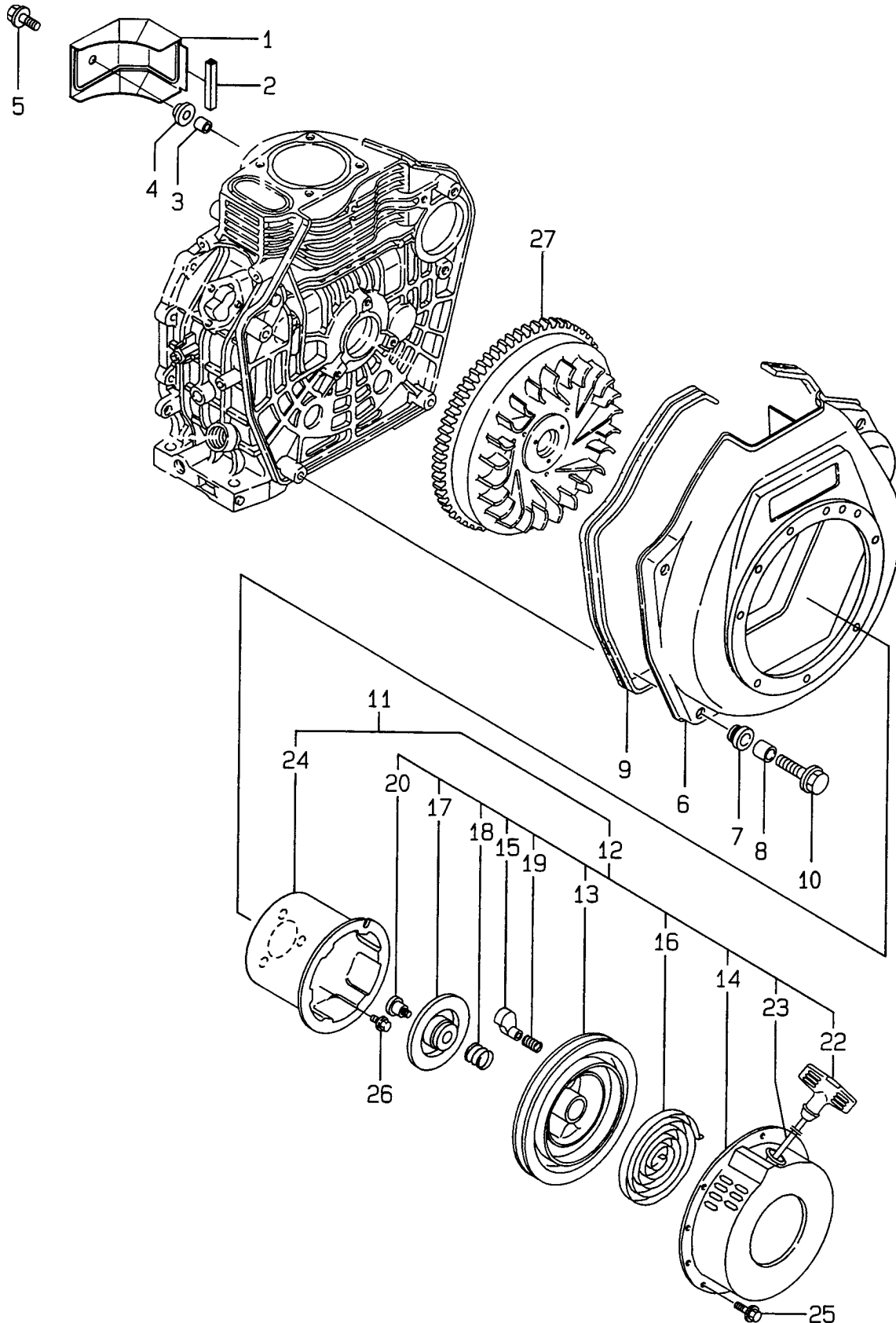
# YANMAR L100EE-DEVMK2— LUB. OIL PUMP AND GOVERNOR ASSY.

## LUB. OIL PUMP AND GOVERNOR ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u>              | <u>QTY.</u> | <u>REMARKS</u>     |
|-----------|----------------|-------------------------------|-------------|--------------------|
| 1         | 11465032010    | PUMP ASSY. LUB. OIL           | 1           |                    |
| 6         | 11425032070    | COVER, LUB. OIL PUMP          | 1           |                    |
| 7         | 10333832570    | O-RING                        | 1           |                    |
| 8         | 22312030160    | PARALLEL PIN 3 X 16           | 1           |                    |
| 9         | 26476060142    | BOLT, M 6 X14, TAPPING        | 3           |                    |
| 10        | 11425035110    | STRAINER, LUB. OIL ASSY. .... | 1           | INCLUDES ITEMS W/* |
| 11*       | 11425035070    | STRAINER, LUB. OIL            | 1           |                    |
| 12*       | 24341000224    | O-RING 1A S-22.4              | 1           |                    |
| 13        | 26106060162    | BOLT M 6 X 16 PLATED          | 1           |                    |
| 21        | 71468561700    | GOVERNOR ASSY.                | 1           |                    |
| 27        | 11477061520    | BEARING, NEEDLE               | 2           |                    |
| 28        | 11477061600    | SEAL, OIL                     | 1           |                    |
| 29        | 11477061610    | WASHER, THRUST                | 1           |                    |
| 30        | 22137080000    | WASHER 8, POLISHED            | 1           |                    |
| 32        | 11497066010    | SPRING, REGULATOR             | 1           |                    |
| 33        | 11425066200    | SPRING, RETURN                | 1           |                    |
| 39        | 26776100002    | LOCK NUT M10 PLATED           | 1           |                    |
| 40        | 13521061090    | LEAD                          | 1           |                    |
| 41        | 22451060000    | WIRE 0.6                      | 1           |                    |
| 42        | 11425066550    | TORQUE SPRING ASSY.           | 1           |                    |
| 47        | 71468561500    | LEVER ASSY., GOVERNOR         | 1           |                    |
| 10        | 11425035110    | STRAINER, LUB. OIL ASSY. .... | 1           | INCLUDES ITEMS W/+ |
| 55+       | 22322030200    | TAPER PIN 3 X 20              | 1           |                    |
| 56        | 11425266051    | HANDLE, REGULATOR             | 1           |                    |
| 58        | 18336066110    | BRACKET, REGULATOR            | 1           |                    |
| 59        | 11425266252    | SPRING, RETURN                | 1           |                    |
| 60        | 11425066440    | BOLT, ADJUSTING               | 1           |                    |
| 61        | 10522566990    | SCREW                         | 1           |                    |
| 62        | 26106060202    | BOLT M 6 X 20 PLATED          | 1           |                    |
| 63        | 26476060142    | BOLT M 6 X 14 TAPPING         | 1           |                    |
| 64        | 26757060002    | NUT 6                         | 1           |                    |
| 66        | 11477161800    | WASHER                        | 1           |                    |
| 67        | 11477161820    | PLATE                         | 1           |                    |
| 68        | 11477161900    | PROCTECTOR                    | 1           |                    |
| 69        | 11477161930    | NUT                           | 1           |                    |
| 70        | 24311000125    | O-RING 1A P-12.5              | 1           |                    |

# YANMAR L100EE-DEVMK2 — COOLING AND STARTING DEVICE ASSY.

COOLING AND STARTING DEVICE ASSY.



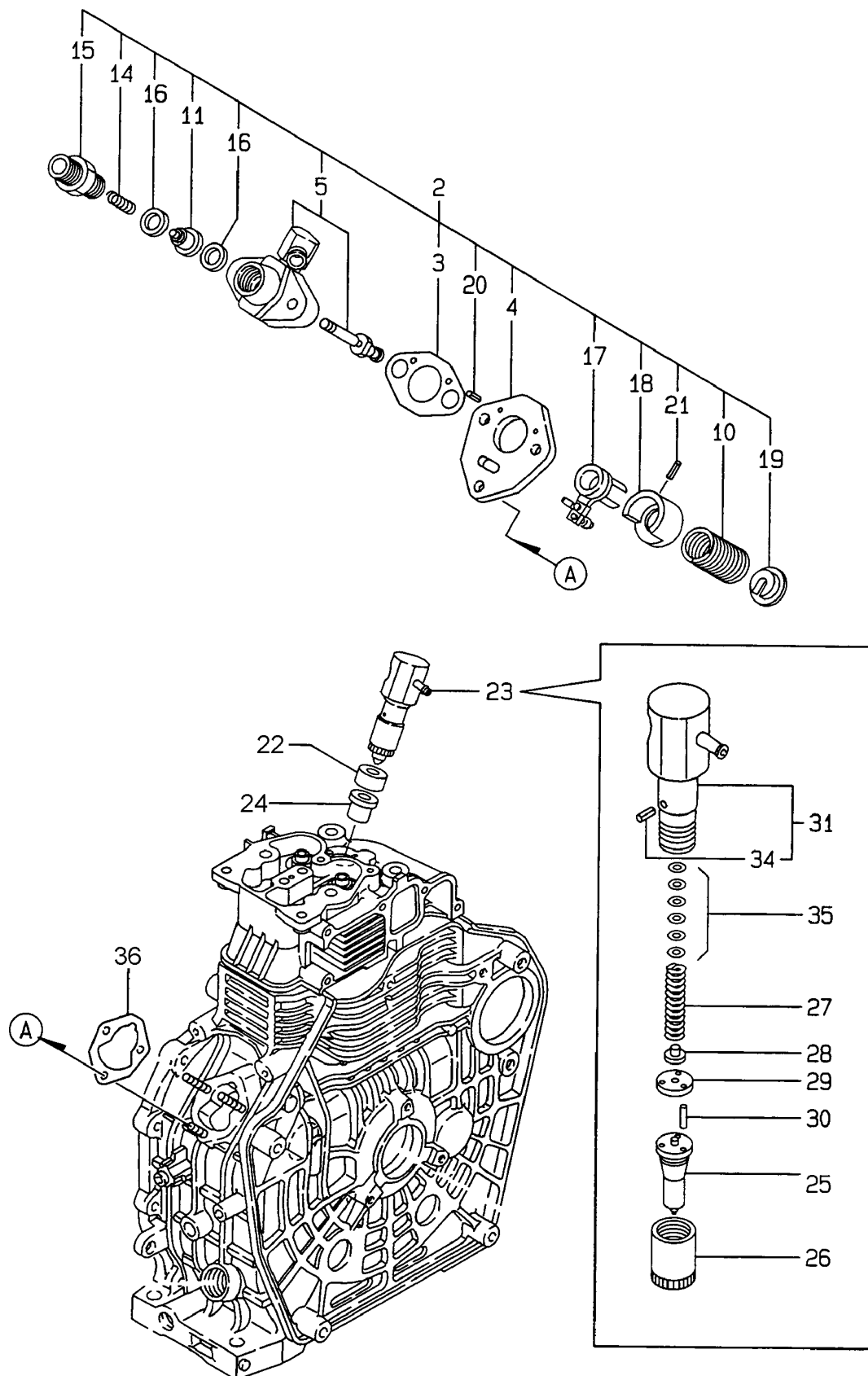
# YANMAR L100EE-DEVK2 — COOLING AND STARTING DEVICE ASSY.

## COOLING AND STARTING DEVICE ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u>           | <u>QTY.</u> | <u>REMARKS</u>      |
|-----------|----------------|----------------------------|-------------|---------------------|
| 1         | 11465045201    | COVER                      | 1           |                     |
| 2         | 11435045320    | RUBBER, SEAL               | 1           |                     |
| 3         | 11435045340    | COLLAR                     | 1           |                     |
| 4         | 18372055210    | GROMMET                    | 1           |                     |
| 5         | 26106060202    | BOLT M 6 X 20 PLATED       | 1           |                     |
| 6         | 11466845102    | CASE, FAN SILVER 17        | 1           |                     |
| 7         | 11425045301    | RUBBER, CUSHION            | 4           |                     |
| 8         | 11425045310    | COLLAR                     | 4           |                     |
| 9         | 11465045330    | SEAL, FAN CASE             | 1           |                     |
| 10        | 11437045351    | BOLT, FAN CASE             | 4           |                     |
| 11        | 11466076052    | RECOIL STARTER D ASSY..... | 1           | INCLUDES ITEMS W/*  |
| 12*       | 11466076251    | RECOIL ASSY. ....          | 1           | INCLUDES ITEMS W/\$ |
| 13*\$     | 11488076520    | REEL, RECOIL               | 1           |                     |
| 14*\$     | 11466076531    | CASE D, W/NO LABEL         | 1           |                     |
| 15*\$     | 11487076530    | RATCHET                    | 2           |                     |
| 16*\$     | 11487076540    | SPRING, SPRIAL             | 1           |                     |
| 17*\$     | 11487076550    | GUIDE, RATCHET             | 1           |                     |
| 18*\$     | 11487076560    | SPRING, FRICTION           | 1           |                     |
| 19*\$     | 11487076570    | SPRING, RETURN             | 2           |                     |
| 20*\$     | 11487076580    | SET SCREW                  | 1           |                     |
| 22*\$     | 11487076620    | KNOB, STARTER              | 1           |                     |
| 23*\$     | 11465076631    | ROPE, RECOIL STARTER       | 1           |                     |
| 24*       | 11466076592    | PULLEY, STARTER            | 1           |                     |
| 25        | 26106060082    | BOLT M 6 X 8 PLATED        | 4           |                     |
| 26        | 26106060122    | BOLT M 6 X 12 PLATED       | 3           |                     |
| 27        | 11466221593    | FLYWHEEL, DEJ. W/ GEAR     | 1           |                     |

# YANMAR L100EE-DEVMK2— FUEL INJECTION PUMP ASSY.

FUEL INJECTION PUMP ASSY.



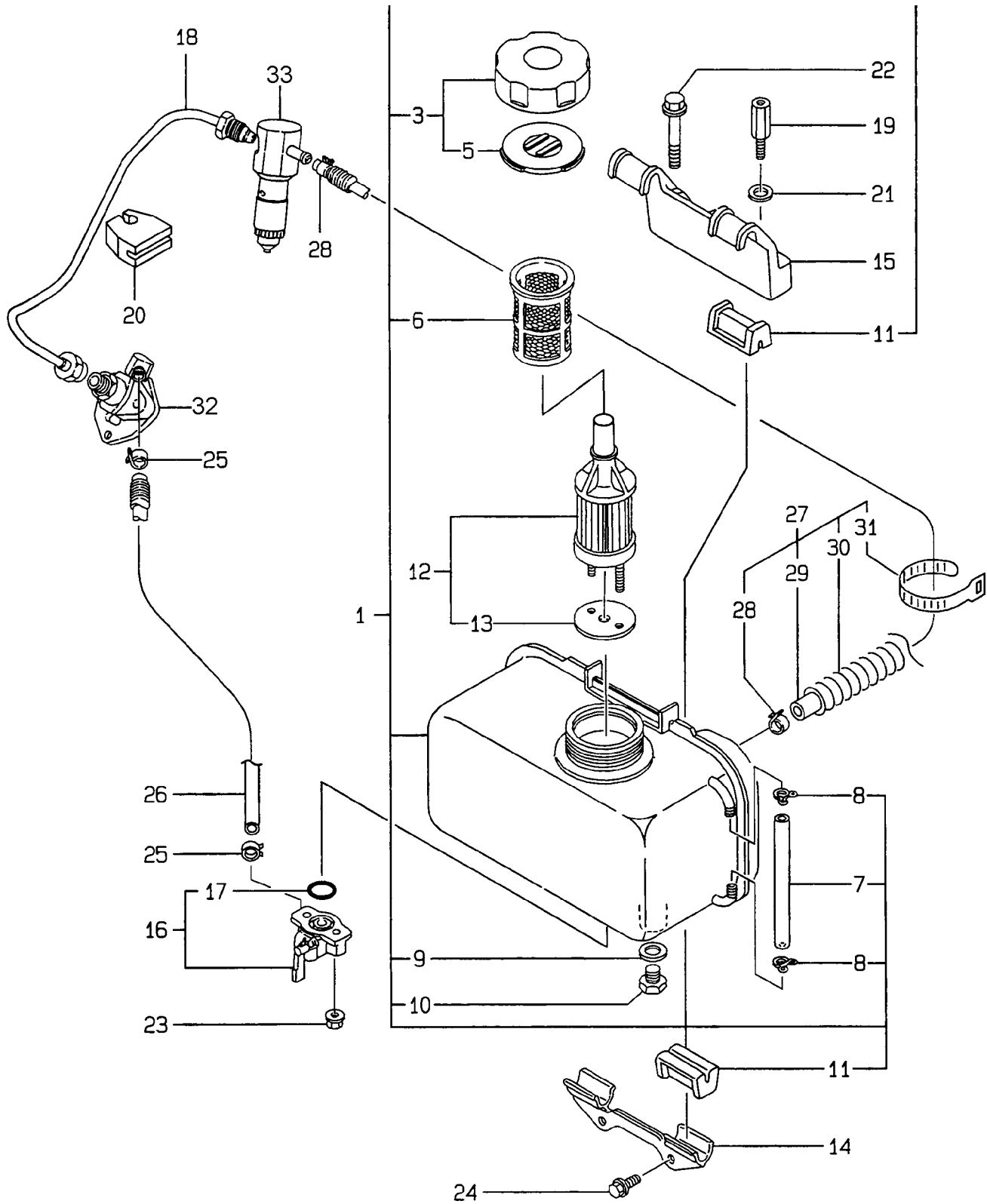
# YANMAR L100EE-DEVMK2— FUEL INJECTION PUMP ASSY.

## FUEL INJECTION PUMP ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u>                 | <u>QTY.</u> | <u>REMARKS</u>     |
|-----------|----------------|----------------------------------|-------------|--------------------|
| 2         | 71465651110    | PUMP ASSY., FUEL INJECTORS ..... | 1.....      | INCLUDES ITEMS W/* |
| 3*        | 10554651020    | GASKET                           | 1           |                    |
| 4*        | 11425051080    | PLATE                            | 1           |                    |
| 5*        | 11497051100    | BODY, F.I. PUMP                  | 1           |                    |
| 10*       | 11425051160    | SPRING                           | 1           |                    |
| 11*       | 11465051300    | VALVE ASSY., DELIVERY            | 1           |                    |
| 14*       | 10554651330    | SPRING, DELIVERY VALVE           | 1           |                    |
| 15*       | 11425051340    | HOLDER, F. I. P. DELIVERY        | 1           |                    |
| 16*       | 12455051350    | GASKET, DELIVERY                 | 2           |                    |
| 17*       | 11425051600    | LEVER ASSY., CONTROL             | 1           |                    |
| 18*       | 11425051640    | SEAT A, SPRING                   | 1           |                    |
| 19*       | 11425051650    | SEAT B, SPRING                   | 1           |                    |
| 20*       | 22351020006    | SPRING PIN 2 X 6                 | 2           |                    |
| 21*       | 22351030008    | SPRING PIN 3 X 8                 | 2           |                    |
| 22        | 11477111470    | SPACER, NOZZLE                   | 1           |                    |
| 23        | 71487553101    | VALVE ASSY., F. INJECT .....     | 1.....      | INCLUDES ITEMS W/+ |
| 24        | 11477111461    | GASKET, NOZZLE                   | 1           |                    |
| 25+       | 11487153000    | NOZZLE, ASSY.                    | 1           |                    |
| 26+       | 11959353080    | NUT, NOZZLE CASE                 | 1           |                    |
| 27+       | 11425053120    | SPRING, NOZZLE                   | 1           |                    |
| 28+       | 11959353130    | RETAINER                         | 1           |                    |
| 29+       | 11477553140    | SPACER, VALVE STOP               | 1           |                    |
| 30+       | 11477553210    | PIN                              | 2           |                    |
| 31+       | 11487553100    | HOLDER ASSY. ....                | 1.....      | INCLUDES ITEMS W/% |
| 34+%      | 11425053331    | PIN, SPRING                      | 1           |                    |
| 35+       | 11425053400    | SHIM PACK                        | 1           |                    |
| 36        | 11425001800    | SHIM SET                         | 1           |                    |

# YANMAR L100EE-DEVMK2 — FUEL TANK AND FUEL PIPE ASSY.

## FUEL TANK AND FUEL PIPE ASSY.





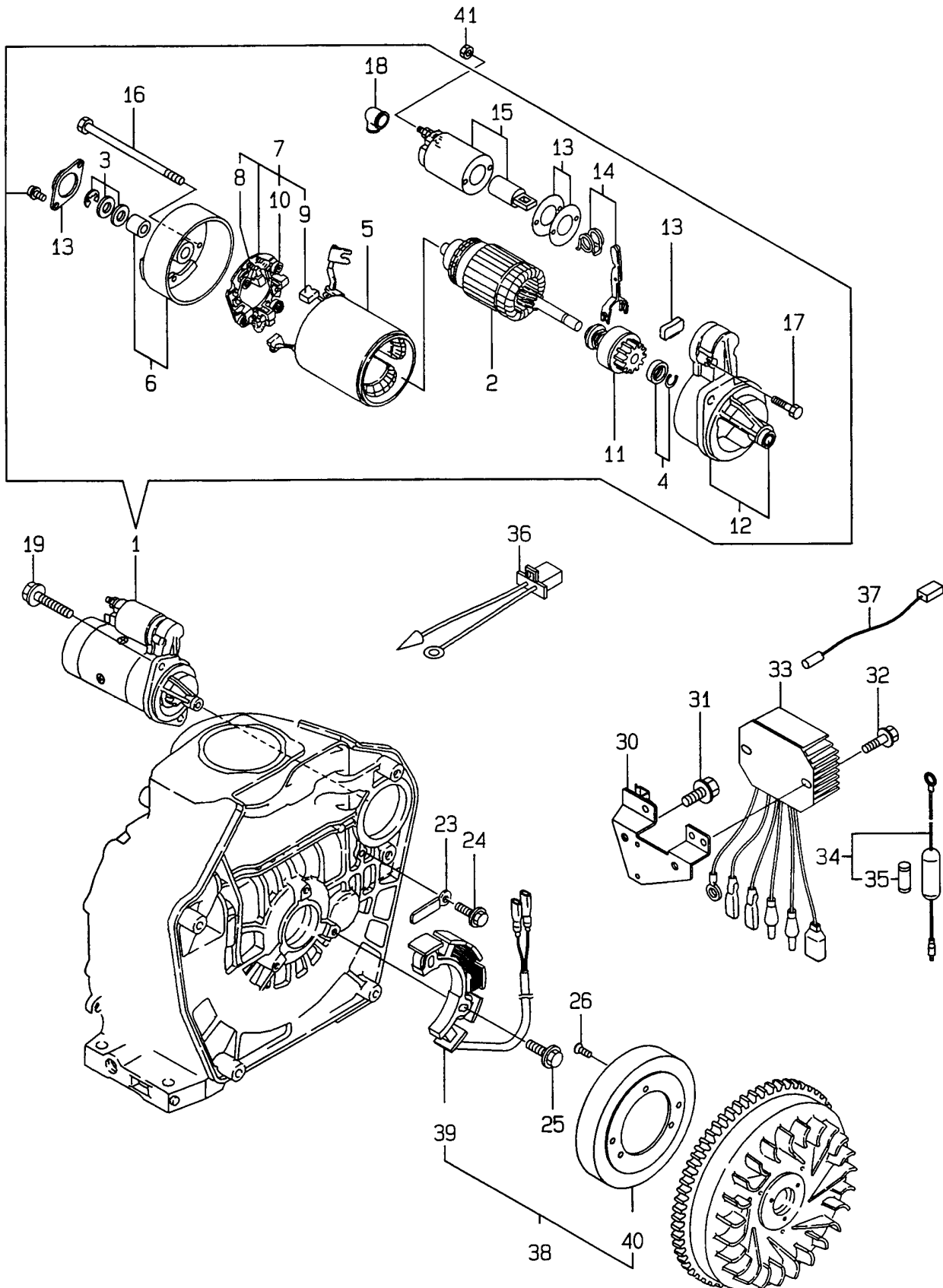
# YANMAR L100EE-DEVMK2 — FUEL TANK AND FUEL PIPE ASSY.

## FUEL TANK AND FUEL PIPE ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u>            | <u>QTY.</u> | <u>REMARKS</u>     |
|-----------|----------------|-----------------------------|-------------|--------------------|
| 1         | 71465055130    | TANK ASSY., FUEL .....      | 1 .....     | INCLUDES ITEMS W/* |
| 3*        | 11428855041    | CAP ASSY., FUEL TANK .....  | 1 .....     | INCLUDES ITEMS W/+ |
| 5*+       | 11428855081    | VALVE                       | 1           |                    |
| 6*        | 11425055100    | FILTER, FUEL                | 1           |                    |
| 7         | 11465055150    | PIPE, GAUGE                 | 1           |                    |
| 8         | 10385455220    | CLAMP                       | 2           |                    |
| 9*        | 23414080000    | GASKET 8, ROUND             | 1           |                    |
| 10*       | 10530055080    | PLUG, DRAIN                 | 1           |                    |
| 11        | 11425055201    | DAMPER, FUEL TANK           | 4           |                    |
| 12*       | 11425055121    | FILTER, FUEL OIL .....      | 1 .....     | INCLUDES ITEMS W/# |
| 13#       | 11425055130    | GASKET                      | 1           |                    |
| 14        | 11429955210    | STAY                        | 1           |                    |
| 15        | 11469955230    | STAY B, FUEL TANK           | 1           |                    |
| 16        | 11425055300    | COCK ASSY., FUEL .....      | 1 .....     | INCLUDES ITEMS W/% |
| 17%       | 24341000150    | O-RING 1A S-15.0            | 1           |                    |
| 18        | 11465159802    | PIPE, FUEL INJECTION        | 1           |                    |
| 19        | 11456055810    | BOLT, LIFTING               | 1           |                    |
| 20        | 11465059850    | BRACKET, PIPE               | 1           |                    |
| 21        | 22117080000    | WASHER 8                    | 1           |                    |
| 22        | 26106080452    | BOLT M 8 X 45 PLATED        | 1           |                    |
| 23        | 26366060002    | NUT M 6                     | 2           |                    |
| 24        | 26476060142    | BOLT M 6 X 14 TAPPING       | 2           |                    |
| 25        | 10699044660    | CLIP, HOSE                  | 2           |                    |
| 26        | 11426859061    | PIPE, FUEL OIL              | 1           |                    |
| 27        | 11465259300    | PIPE, FUEL RETURN .....     | 1 .....     | INCLUDES ITEMS W/■ |
| 28■       | 12472259050    | CLAMP 9                     | 2           |                    |
| 29■       | 11465059060    | PIPE, FUEL RETURN           | 1           |                    |
| 30■       | 11465259310    | TUBE, PROTECT               | 1           |                    |
| 31■       | 12175059890    | CLAMP 140                   | 1           |                    |
| 32        | 71465651110    | PUMP ASSY., FUEL INJECTION  | 1           |                    |
| 33        | 71465653101    | VALVE ASSY., FUEL INJECTION | 1           |                    |

# YANMAR L100EE-DEVMK2 — STARTING MOTOR AND DYNAMO ASSY.

STARTING MOTOR AND DYNAMO ASSY.



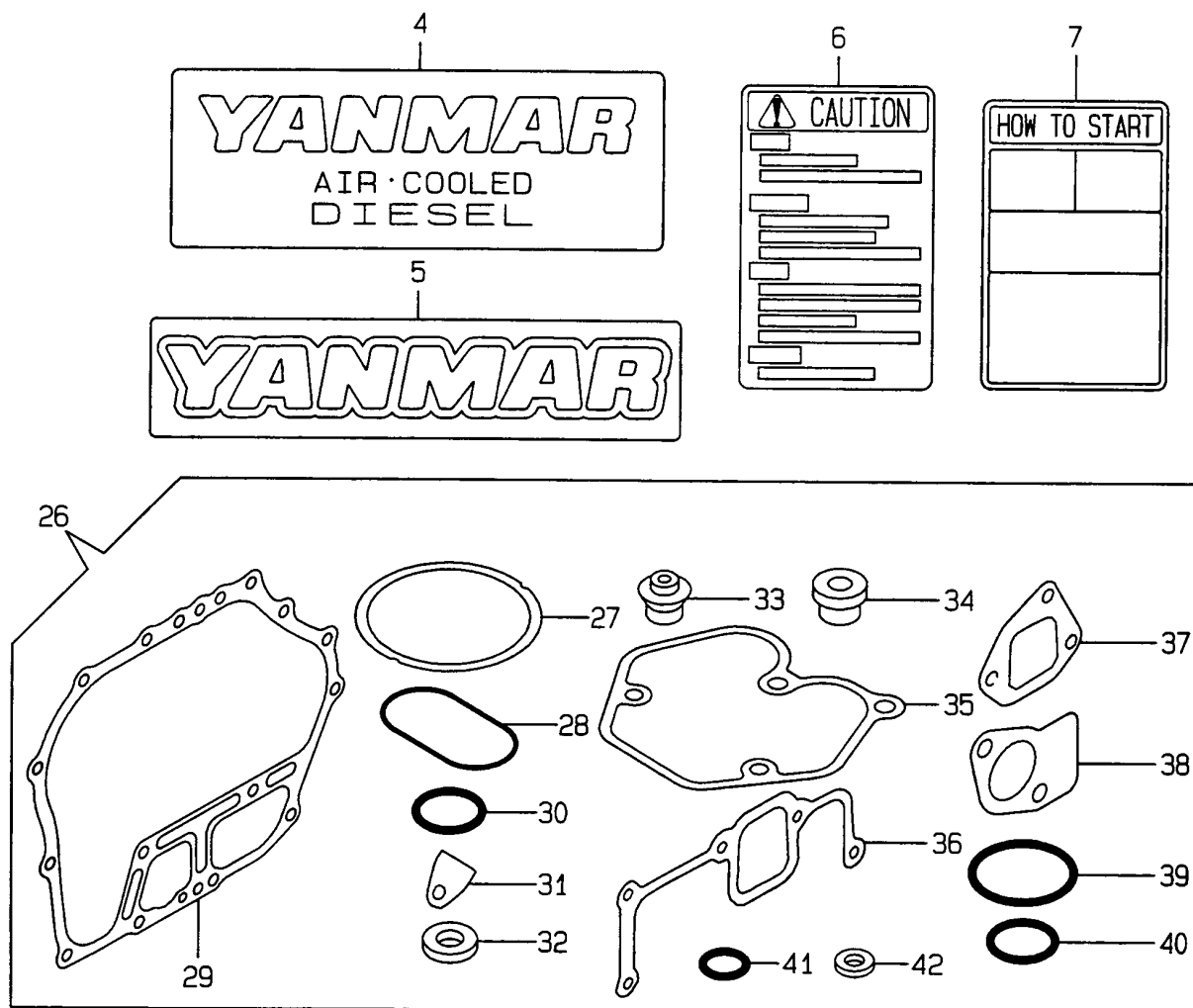
# YANMAR L100EE-DEVMK2 — STARTING MOTOR AND DYNAMO ASSY.

## STARTING MOTOR AND DYNAMO ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u>          | <u>QTY.</u> | <u>REMARKS</u>      |
|-----------|----------------|---------------------------|-------------|---------------------|
| 1         | 11436277011    | STARTER, S114-651A .....  | 1 .....     | INCLUDES ITEMS W/*  |
| 2*        | 11438177110    | ARMATURE                  | 1           |                     |
| 3*        | X2114811000    | WASHER KIT, THRUST        | 1           |                     |
| 4*        | X2114715500    | STOPPER SET, PINION       | 1           |                     |
| 5*        | 11438177130    | COIL ASSY., FIELD         | 1           |                     |
| 6*        | 11438177140    | COVER, REAR               | 1           |                     |
| 7*        | 11437177160    | HOLDER ASSY., BRUSH ..... | 1 .....     | INCLUDES ITEMS W/ + |
| 8* +      | 11437179040    | BRUSH, -                  | 1           |                     |
| 9* +      | 11437179050    | BRUSH, +                  | 1           |                     |
| 10* +     | 11437179060    | SPRING, BRUSH             | 4           |                     |
| 11*       | X211485016     | PINION ASSY.              | 1           |                     |
| 12*       | 11438177151    | HOUSING ASSY. GEAR        | 1           |                     |
| 13*       | 11437177170    | COVER KIT, DUST           | 1           |                     |
| 14*       | 11437177180    | SHIFT LEVER KIT           | 1           |                     |
| 15*       | 12429877020    | SWITCH, MAGNET            | 1           |                     |
| 16*       | 12419577770    | BOLT, THROUGH             | 2           |                     |
| 17*       | 11437179070    | BOLT M 6 X 37             | 2           |                     |
| 18        | X2114274200    | COVER, TERMINAL           | 1           |                     |
| 19        | 26106100302    | BOLT M 10 X 30 PLATED     | 2           |                     |
| 23        | 16071078710    | CLAMP, CORD               | 1           |                     |
| 24        | 26106060122    | BOLT M 6 X 12 PLATED      | 1           |                     |
| 25        | 26106060202    | BOLT M 6 X 20 PLATED      | 3           |                     |
| 26        | 26577060142    | SCREW M 6 X 14            | 3           |                     |
| 30        | 11438577400    | BRACKET                   | 1           |                     |
| 31        | 26106060122    | BOLT M 6 X 12 PLATED      | 2           |                     |
| 32        | 26106060202    | BOLT M 6 X 20 PLATED      | 2           |                     |
| 33        | 11435177210    | REGULATOR                 | 1           |                     |
| 34        | 11435177640    | FUSE ASSY. ....           | 1 .....     | INCLUDES ITEMS W/%  |
| 35%       | 29411200000    | FUSE 20A, CARTRIDGE       | 1           |                     |
| 36        | 10519878570    | HARNESS C, WIRE           | 1           |                     |
| 37        | 11498578560    | HARNESS, WIRE             | 1           |                     |
| 38        | 11435178261    | DYNAMO ASSY. ....         | 1 .....     | INCLUDES ITEMS W/ # |
| 39 #      | 11435178771    | STATOR ASSY., 132.1MM     | 1           |                     |
| 40 #      | 11435178781    | WHEEL, STATOR, 132.1MM    | 1           |                     |
| 41        | 26716080002    | NUT M 8                   | 1           |                     |

# YANMAR L100EE-DEVMK2 — TOOL LABEL AND GASKET SET ASSY.

TOOL LABEL AND GASKET SET ASSY.



# YANMAR L100EE-DEVMK2 — TOOL LABEL AND GASKET SET ASSY.

TOOL LABEL AND GASKET SET ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u>           | <u>QTY.</u> | <u>REMARKS</u>     |
|-----------|----------------|----------------------------|-------------|--------------------|
| 4         | 11425007090    | LABEL, AIR COOLED          | 1           |                    |
| 5         | 11425007111    | LABEL, YANMAR              | 1           |                    |
| 6         | 11426807240    | LABEL, CAUTION             | 1           |                    |
| 7         | 11426107350    | LABEL                      | 1           |                    |
| 26        | 71465192620    | GASKET SET .....           | 1           | INCLUDES ITEMS W/* |
| 27*       | 11465101330    | GASKET, CYLINDER HEAD CMP. | 1           |                    |
| 28*       | 11465001380    | O-RING                     | 1           |                    |
| 29*       | 11465001412    | GASKET, CRANKCASE          | 1           |                    |
| 30*       | 11429901950    | O-RING                     | 1           |                    |
| 31*       | 11425001841    | GASKET                     | 1           |                    |
| 32*       | 22190160002    | SEAL WASHER 16S            | 4           |                    |
| 33*       | 11465011340    | SEAL, VALVE STEM           | 2           |                    |
| 34*       | 11477111461    | GASKET, NOZZLE             | 1           |                    |
| 35*       | 11465111310    | GASKET, BONNET             | 1           |                    |
| 36*       | 11465012301    | GASKET, AIR INTAKE         | 1           |                    |
| 37*       | 11465012211    | GASKET, AIR CLEANER        | 1           |                    |
| 38*       | 11465013201    | GASKET, NON-ASB            | 2           |                    |
| 39*       | 10333832570    | O-RING                     | 1           |                    |
| 40*       | 24341000224    | O-RING 1A S-22.4           | 1           |                    |
| 41*       | 24311000125    | O-RING 1A P-12.5           | 1           |                    |
| 42*       | 23414080000    | GASKET 8, ROUND            | 1           |                    |

**PAYMENT TERMS**

Terms of payment for parts are net 10 days.

**FREIGHT POLICY**

All parts orders will be shipped collect or prepaid with the charges added to the invoice. All shipments are F.O.B. point of origin. Multiquip's responsibility ceases when a signed manifest has been obtained from the carrier, and any claim for shortage or damage must be settled between the consignee and the carrier.

**MINIMUM ORDER**

The minimum charge for orders from Multiquip is \$15.00 net. Customers will be asked for instructions regarding handling of orders not meeting this requirement.

**RETURNED GOODS POLICY**

Return shipments will be accepted and credit will be allowed, subject to the following provisions:

1. A Returned Material Authorization must be approved by Multiquip prior to shipment.
2. To obtain a Return Material Authorization, a list must be provided to Multiquip Parts Sales that defines item numbers, quantities, and descriptions of the items to be returned.
  - a. The parts numbers and descriptions must match the current parts price list.
  - b. The list must be typed or computer generated.
  - c. The list must state the reason(s) for the return.
  - d. The list must reference the sales order(s) or invoice(s) under which the items were originally purchased.
  - e. The list must include the name and phone number of the person requesting the RMA.
3. A copy of the Return Material Authorization must accompany the return shipment.
4. Freight is at the sender's expense. All parts must be returned freight prepaid to Multiquip's designated receiving point.

5. Parts must be in new and resalable condition, in the original Multiquip package (if any), and with Multiquip part numbers clearly marked.
6. The following items are not returnable:
  - a. Obsolete parts. (If an item is in the price book and shows as being replaced by another item, it is obsolete.)
  - b. Any parts with a limited shelf life (such as gaskets, seals, "O" rings, and other rubber parts) that were purchased more than six months prior to the return date.
  - c. Any line item with an extended dealer net price of less than \$5.00.
  - d. Special order items.
  - e. Electrical components.
  - f. Paint, chemicals, and lubricants.
  - g. Decals and paper products.
  - h. Items purchased in kits.
7. The sender will be notified of any material received that is not acceptable.
8. Such material will be held for five working days from notification, pending instructions. If a reply is not received within five days, the material will be returned to the sender at his expense.
9. Credit on returned parts will be issued at dealer net price at time of the original purchase, less a 15% restocking charge.
10. In cases where an item is accepted, for which the original purchase document can not be determined, the price will be based on the list price that was effective twelve months prior to the RMA date.
11. Credit issued will be applied to future purchases only.

**PRICING AND REBATES**

Prices are subject to change without prior notice. Price changes are effective on a specific date and all orders received on or after that date will be billed at the revised price.

Rebates for price declines and added charges for price increases will not be made for stock on hand at the time of any price change.

Multiquip reserves the right to quote and sell direct to Government agencies, and to Original Equipment Manufacturer accounts who use our products as integral parts of their own products.

**SPECIAL EXPEDITING SERVICE**

A \$35.00 surcharge will be added to the invoice for special handling including bus shipments, insured parcel post or in cases where Multiquip must personally deliver the parts to the carrier.

**LIMITATIONS OF SELLER'S LIABILITY**

Multiquip shall not be liable here under for damages in excess of the purchase price of the item with respect to which damages are claimed, and in no event shall Multiquip be liable for loss of profit or good will or for any other special, consequential or incidental damages.

**LIMITATION OF WARRANTIES**

No warranties, express or implied, are made in connection with the sale of parts or trade accessories nor as to any engine not manufactured by Multiquip. Such warranties made in connection with the sale of new, complete units are made exclusively by a statement of warranty packaged with such units, and Multiquip neither assumes nor authorizes any person to assume for it any other obligation or liability whatever in connection with the sale of its products. Apart from such written statement of warranty, there are no warranties, express, implied or statutory, which extend beyond the description of the products on the face hereof.



# OPERATION AND PARTS MANUAL

## **HERE'S HOW TO GET HELP**

*PLEASE HAVE THE MODEL AND SERIAL  
NUMBER ON-HAND WHEN CALLING*

### **PARTS DEPARTMENT**

*800-427-1244 or 310-537-3700*

*FAX: 800-672-7877 or 310-637-3284*

### **SERVICE DEPARTMENT**

*800-421-1244*

*FAX: 310- 537-4259*

### **TECHNICAL ASSISTANCE**

*800-478-1244*

*FAX: 310- 631-5032*

### **WARRANTY DEPARTMENT**

*888-661-4279, or 310-661-4279*

*FAX: 310- 537-1173*



**MULTIQUIP INC.**  
POST OFFICE BOX 6254  
CARSON, CA 90749  
310-537-3700 • 800-421-1244  
FAX: 310-537-3927  
E-MAIL: mq@multiquip.com  
WWW: multiquip.com

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