

OPERATION AND PARTS MANUAL



AWD POWER BUGGY MODEL WBH-16EAWD (ELECTRIC START)

Revision #5 (01/05/07)

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THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.



CALIFORNIA — Proposition 65 Warning

Engine exhaust and some of its constituents, and some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks.
- Cement and other masonry products.
- Arsenic and chromium from chemically treated lumber.

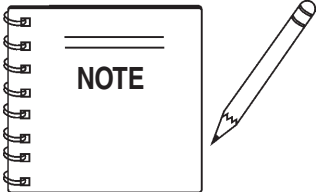
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: **ALWAYS** work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

**MQ-Whiteman
WBH-16EAWD
Power Buggy**

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Specification and part number are subject to change without notice.

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Note: Discounts Are Subject To Change



Order via Phone: Domestic (US) Dealers Call:
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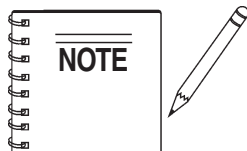
Contact your local Multiquip Dealer for parts or call 800-427-1244 for help in locating a dealer near you.



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- | | |
|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Dealer Account Number <input type="checkbox"/> Dealer Name and Address <input type="checkbox"/> Shipping Address (if different than billing address) <input type="checkbox"/> Return Fax Number <input type="checkbox"/> Applicable Model Number <input type="checkbox"/> Quantity, Part Number and Description of Each Part | <ul style="list-style-type: none"> <input type="checkbox"/> Specify Preferred Method of Shipment: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> UPS/Fed Ex <input checked="" type="checkbox"/> DHL <input type="checkbox"/> Priority One <input checked="" type="checkbox"/> Truck <input type="checkbox"/> Ground <input type="checkbox"/> Next Day <input type="checkbox"/> Second/Third Day |
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All orders are treated as *Standard Orders* and will ship the same day if received prior to 3PM PST.

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WBH-16EAWD POWER BUGGY — SPECIFICATIONS (AWD POWER BUGGY)

TABLE 1. SPECIFICATIONS (POWER BUGGY)

| | |
|-------------------------------|--------------------------------------|
| Model | WBH-16EAWD |
| Wheelbase | 44 in. (1117.6 mm) |
| Overall Length | 103 in. (2616.2 mm) |
| Overall Width- Dual Wheels | 43.25 in. (1098.6 mm) |
| Overall Width - Single Wheels | 30.25 in. (738.65 mm) |
| Overall Height | 53 in. (1346.2 mm) |
| Operating Weight | 1,200 lbs. (544.2 kg.) |
| Bucket Capacity | 16 cu. ft. Water Level (.59 cu. yd.) |
| Weight Capacity | 2500 lbs. (1136 kg) |
| Engine | 18HP Briggs and Stratton Vanguard |
| Starting | Recoil & Electric |
| Drive | Hydrostatic |
| Top Speed (Standard) | 7.25 mph. (11.67 km/h) |
| Top Speed (AWD) | 6.5 mph. (10.46 km/h) |
| Steering | Handle Bars To Rear Wheel |
| Brakes (Drive Wheels) | Dynamic Hydrostatic |
| Parking Brake (Drive Wheels) | Mechanical |
| Dump Control | Hydraulic Dump and Return |
| Discharge Height | 6 in. (127 mm) |
| Ground Clearance | 6 in. (152.4 mm) |
| Turning Radius | 73.5 in. (1867 mm) |
| Tires (Drive Wheels) | 5.70 x 8 x 19 |
| Tires (Steering) | LP 190 x 8 in. |

WBH-16EAWD POWER BUGGY — SPECIFICATIONS (ENGINE)

| TABLE 2. SPECIFICATIONS (VANGUARD ENGINE) | |
|---|--|
| Model | 3504471375E1T1001 |
| Bore X Stroke | 2.82 x 2.75 in. 71.88 x 69.85 mm |
| Displacement | 570 cc |
| Maximum Power | 18.0 hp (3,600 rpm) |
| Maximum Torque | 31.70 ft-lbs. (2,800 rpm) 14.37 kgf-m (2,800 rpm) |
| Idle Speed | 1,400 ± rpm |
| Maximum No Load RPM | 3600 ± 100 rpm |
| Specific Fuel Consumption | 1.64 gals./hr. (6.05 liters/hr.) |
| Fuel Tank Capacity | 5.5 gallons (20.8 liters) |
| Crankcase Oil Capacity | 3.52 pints (1.66 liters) |
| Starting System | Recoil/Electric |
| Spark Plug Gap | 0.028 - 0.030 in. (0.70 - 0.76 mm) |
| Air Cleaner | Dual Element |
| Dry Weight | 74.0 lbs. (33.56 kg.) |
| Outside Dimensions L X W X H | 17.40 x 10.60 x 18.14 in. (442 x 269 x 461 mm) |

WBH-16EAWD POWER BUGGY — DIMENSIONS

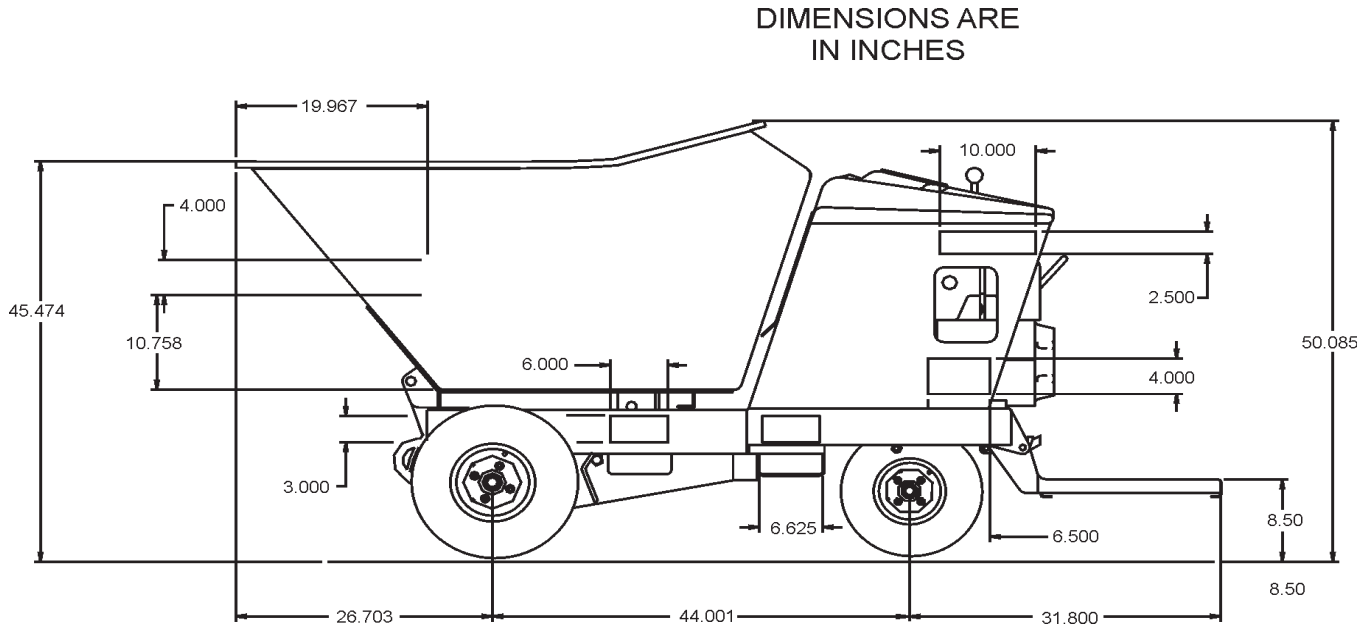


Figure 2. WBH-16EAWD Power Buggy Dimensions (Side-View)

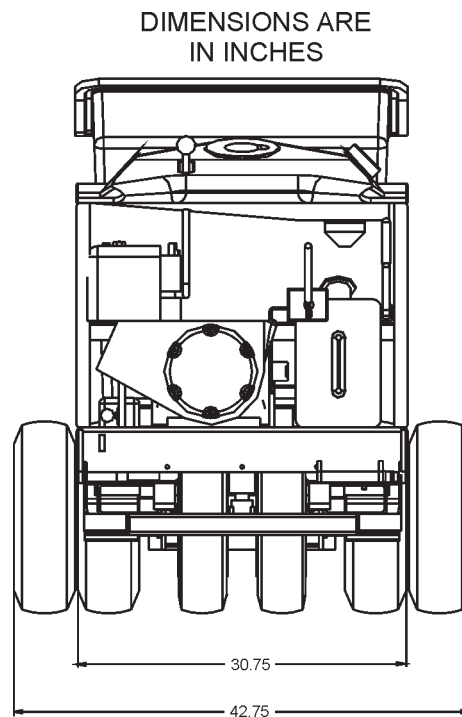
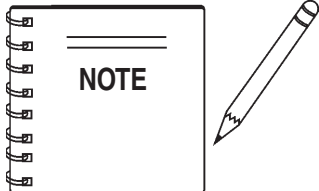


Figure 3. WBH-16EAWD Power Buggy Dimensions (Rear-View)

WBH-16EAWD POWER BUGGY — 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 operations of the MQ Whiteman Model WBH-16EAWD Power Buggy. Depending on the engine you have selected, please refer to the engine manufacturers instructions for data relative to its safe operations.

Before using this AWD Power Buggy, 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 AWD Power Buggy operations 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.

WBH-16EAWD POWER BUGGY — SAFETY MESSAGE ALERT SYMBOLS



Accidental Starting



ALWAYS place the engine ON/OFF switch in the OFF position, and/or disconnect the spark plug lead before servicing the engine or equipment. Ground the lead to prevent sparks that could ignite a fire.



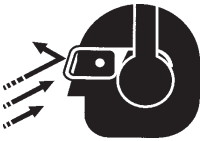
Respiratory Hazard



ALWAYS wear approved respiratory protection.



Sight and Hearing hazard

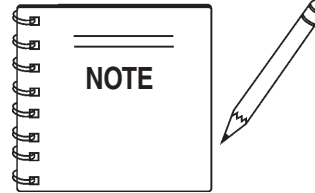


ALWAYS wear approved eye and hearing protection.



Equipment Damage Messages

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



This AWD Power Buggy, other property, or the surrounding environment could be damaged if you do not follow instructions.

WBH-16EAWD POWER BUGGY — RULES FOR SAFE OPERATION

WARNING:



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 MQ Whiteman WBH-16EAWD Power Buggy:

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.



- **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.



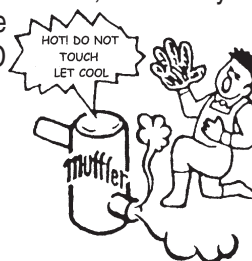
- **NEVER** use accessories or attachments, which are not recommended by Multiquip for this equipment. Damage to the equipment and/or injury to user may result.

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

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

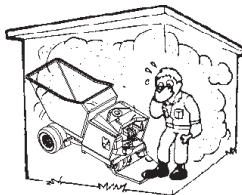
- Always check the machine for loosened threads or bolts before starting.

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



- **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 section of this AWD Power Buggy requires an adequate free flow of cooling air. Never operate the AWD Power Buggy 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 AWD Power Buggy or engine and may cause injury to people. Remember the power buggy's engine gives off **DEADLY** carbon monoxide gas.



- 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 AWD Power Buggy in an explosive atmosphere or near combustible materials. An explosion or fire could result causing severe *bodily harm or even death*.

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

- **NEVER** use fuel as a cleaning agent.

WBH-16EAWD POWER BUGGY — RULES FOR SAFE OPERATION

GENERAL SAFETY

- 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 operating techniques before using the saw.
- Stop the engine when leaving the AWD Power Buggy unattended.
- Block the unit when leaving or when using on a slope.
- Maintain this equipment in a safe operating condition at all times.
- Always stop the engine before servicing, adding fuel and oil.
- **NEVER** run engine without air filter. Severe engine damage may occur.
- Always service air cleaner frequently to prevent carburetor malfunction.
- Always store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children.
- **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.
- **NEVER** operate this AWD Power Buggy in areas that contain combustible material or fumes. Fire and/or explosions may result from errant sparks from the equipment.

WARNING:



- **DO NOT** operate this equipment unless all guards and safety devices are attached and in place.
- Caution must be exercised while servicing this equipment. Rotating and moving parts can cause injury if contacted.
- Keep all inexperienced and unauthorized people away from the equipment at all times.
- Unauthorized equipment modifications will void all warranties.
- Test the **KILL** switch before operating. The purpose of the switch is to shut down the engine in the event of an emergency.
- Test the **engine's ON/OFF** switch before operating. The purpose of the switch is to shut down the engine.
- If the AWD Power Buggy is to be used over rough terrain, place the step plate (platform) in the upright position, and make sure that it sufficiently secure.

- **DO NOT** stand on the power buggy's "step plate" when walking in rough terrain. Walk behind the AWD Power Buggy.
- **CHECK** the free speed control linkage located on the right handle bar. The **speed control lever** should work freely and return to the closed position if working correctly. **DO NOT** start engine unless speed control linkage is working properly.
- **CHECK** the buggy's tire pressure. Make sure that the tires are inflated to the manufactures recommended tire pressure.
- **DO NOT** operate the AWD Power Buggy with bad or worn tires. Always replace defective tires with new ones.
- **ALWAYS** make sure that the power buggy's brakes are working properly.
- **ALWAYS** make sure that the power buggy's foot and hand brakes are working properly. Check brake linkage and adjust as required. Never operate the AWD Power Buggy with a defective braking system.
- **NEVER** drive or tow the AWD Power Buggy in traffic or on public roads.
- **CHECK** the hydraulic dumping mechanism of the tub and make sure that it is working properly.
- **NEVER** move the AWD Power Buggy with the tub in the **DUMP** position (vertical). When traveling of the buggy is required, always leave the tub in the flat (horizontal) position.
- The entire AWD Power Buggy (tub, step stand, shroud, wheels etc.) should be cleaned after every use to prevent a build up of concrete or other debris.
- Operate the controls smoothly. **DO NOT** jerk the steering or any controls.
- Avoid sudden stops, starts, turns or changes in directions.
- **NEVER** attempt to work the control except from operator's position.
- **NEVER** leave the operator's position without first setting the parking brake, and placing controls in neutral (or park).
- **DO NOT** touch, lean on or reach through the dump mechanism or permit others to do so. **HANDS OFF!** Never climb on the AWD Power Buggy or dump mechanism.
- **ALWAYS** stay alert. Should something break, come loose or the equipment fail to operate, stop work, shut off the engine and inspect the AWD Power Buggy.
- **ALWAYS** keep all parts of your body in the operator's position (standing on the platform) while operating the AWD Power Buggy

WBH-16EAWD POWER BUGGY — RULES FOR SAFE OPERATION

AWD POWER BUGGY TRANSPORTATION SAFETY

- When lifting of the AWD Power Buggy is required, use a **properly rated forklift** to lift the AWD Power Buggy. Forklift pockets are provided on the power buggy's frame. Make sure the forklift arms are insert into the power buggy's fork lift pockets a minimum of 24-inches.
- When transporting of the AWD Power Buggy is required, place AWD Power Buggy on a flat bed truck or equivalent and securely tie down.

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.

Emergencies

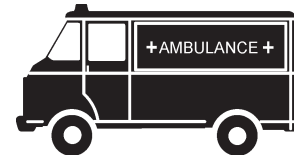
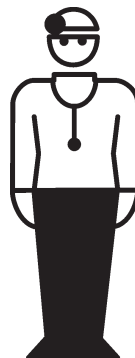
- **ALWAYS** know the location of the nearest **fire extinguisher**.



- **ALWAYS** know the location of the nearest **first aid kit**.



- In emergencies **always** know the location of the nearest phone or **keep a phone on the job site**. Also know the phone numbers of the nearest **ambulance, doctor and fire department**. This information will be invaluable in the case of an emergency.



WBH-16EAWD POWER BUGGY — OPERATION AND SAFETY DECALS

Machine Safety Decals

The WBH-16EAWD Power Buggy is equipped with a number of safety decals (Figure 1). These decals are provided for operator safety and maintenance information. The illustrations below show these decals as they appear on the AWD Power Buggy. Should any of these decals become unreadable, replacements can be obtained from you dealer.

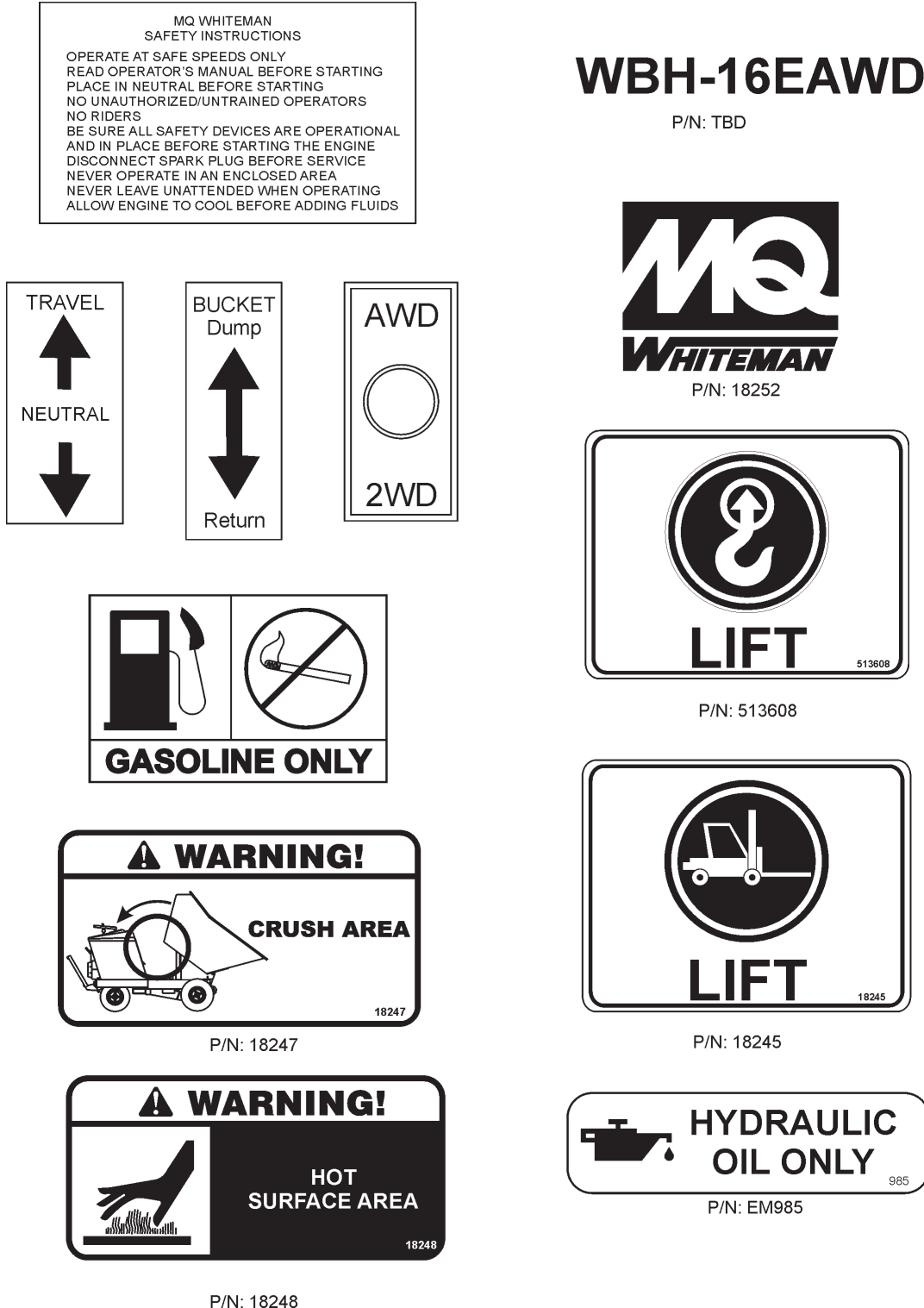


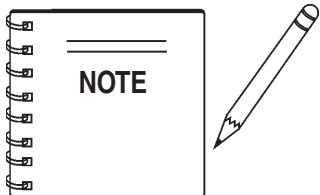
Figure 1. WBH-16EAWD Power Buggy Decals

WBH-16EAWD POWER BUGGY — GENERAL INFORMATION

The MQ Whiteman All-Wheel Drive AWD Power Buggy, Model WBH-16EAWD (electric start) are intended for the transportation of concrete and material handling.

The AWD Power Buggy is equipped with a 6-inch dump height which provides clearance and enables the operator to maneuver over any form height. In addition the AWD Power Buggy has a unique tub design that reduces concrete splatter outside the polyethylene tub (bucket)

A low center of gravity has been incorporated into the power buggy's design which will provide added safety when maneuvering the buggy in tight areas. A 5.5-gallon fuel tank allows for extended uninterrupted use. Maximum speed of the AWD Power Buggy is rated at 7.25 MPH in standard mode and 6.2 MPH in AWD mode.



The maximum weight capacity drops to 1,100 lbs. (499 kg) when using single wheels on the AWD Power Buggy.

The maximum weight capacity of the AWD Power Buggy is 2,500 lbs. (1,136 kg). The outer wheels can be removed to allow the buggy to pass a 32 in. (81.28 cm.) door.

Hand and foot controls are provided for ease of dumping and stopping of the AWD Power Buggy. Multiple lift points have been provided on the AWD Power Buggy. These lifting points allow for easy access of a forklift when lifting is required.

The AWD Power Buggy is powered by an Briggs and Stratton Vanguard air cooled gasoline engine rated at 18 HP at 3600 RPM.

The engine drives a variable displacement hydrostatic transmission which is activated by a cable controlled hand lever. The hydraulic fluid flows to a divider valve which directs the fluid to the forward reverse and dumping systems.

The AWD Power Buggy drive system is controlled by the AWD/2WD toggle switch, located on the console. This switch allows the operator to quickly change from standard drive model (2WD) to All-Wheel Drive mode (AWD). Toggling the switch to AWD mode supplies power to the 12 volt solenoids and traction assist switch. When operating in AWD mode, the top speed of the AWD Power Buggy is reduced to 6.2 MPH.

A Traction Assist button located on the handle allows the operator to momentarily force hydraulic fluid to both drive motors for improved traction. Engaging the traction assist system while in AWD mode provides enhanced traction control by using a specialized hydraulic circuit. This hydraulic circuit provides equal power distribution to the front drive motors, greatly improving performance in poor traction conditions such as sand, mud or loose gravel. This system should only be used as needed and for short periods of time to prevent damaging your AWD Power Buggy.

The operator controls the forward and reverse machine travel by manually shifting the control valve which directs the hydraulic fluid flow to the two drive wheel motors. The flow to the dump cylinder is also controlled by a manually operated control valve.

This hydraulic system uses a parallel loop configuration, operating at a maximum of 1450 PSI. The system also features a neutral position which allows the AWD Power Buggy to be moved in the event of an emergency.

The hydraulic oil is filtered by a screen type filter located in the hydraulic tank, then doubled filtered within the system by a 10 micron cartridge spin-on return filter.

Understand the operation and features of the AWD Power Buggy and what conditions it will be operated in. Know the rated load capacity, speed range, braking and steering characteristics, turning radius and operating clearances.

Remember that the rain, snow, ice, loose gravel, soft ground, etc., can change the operating characteristics and capabilities of the AWD Power Buggy.

Inspect the surface over which you will travel. Look for holes, drop offs and obstacles. Look for rough spots. Look for weak spots on docks, ramps or floor. Look for oil spills, wet spots and slippery surfaces. Look for soft soil, deep mud and standing water. Watch for anything that might make you lose control or cause the Buggy to tip over.

When transporting the AWD Power Buggy on a truck or trailer, know the overall height to avoid contacting overhead obstructions such as bridges, power lines, etc. Make sure all tie-downs and blocks are in place and the bucket is completely lowered and securely latched. If the AWD Power Buggy is to be hauled by truck, check the truck and ramp capacities.

DO NOT leave the AWD Power Buggy in the vicinity of ovens, furnaces or radiant heaters. Heat could raise the pressure of the fuel and open the relief blow-off valve, so that vented gas could ignite.

See Code of Federal Regulation's Occupational Safety & Health Administration (OSHA) 29CFR Part 1910.178 to determine permissible areas where these Buggies can be operated.

This AWD Power Buggy is equipped with a spark arrestor/spark arresting muffler and cannot be operated in areas with flammable or explosive atmospheres. Use of the AWD Power Buggy in these areas can result in fires and/or explosions which could result in serious injury or death.

Understand the **DANGER**, **WARNING**, or **CAUTION** safety signs on the AWD Power Buggy. **READ** this entire manual before operating the AWD Power Buggy.

WARNING:



All AWD Power Buggy operators must have training instructions before operating AWD Power Buggy. For your safety, warnings are on the buggy and in this manual. Failure to obey these warning can cause severe injury or even death.

WBH-16EAWD POWER BUGGY — COMPONENTS

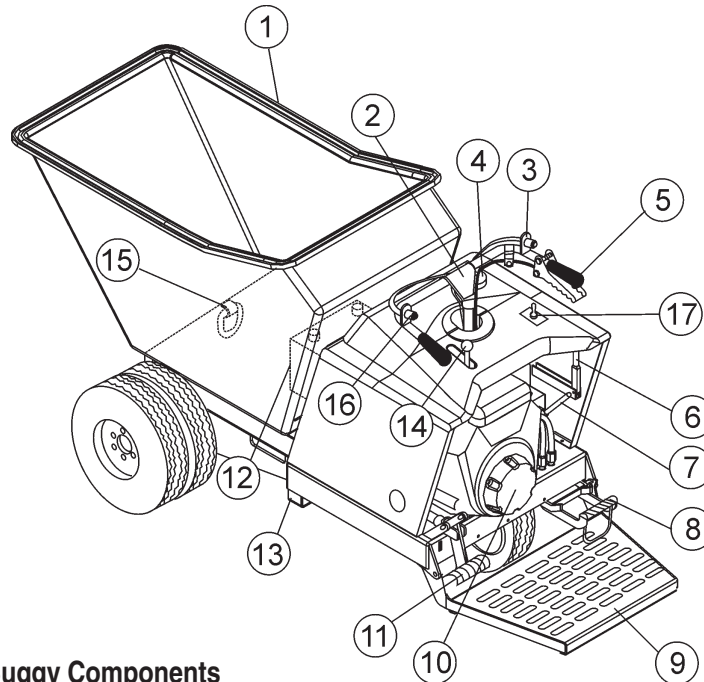


Figure 4. AWD Power Buggy Components

- 1. Tub or Bucket** – Used for the transportation of material. Tub holds approximately 16 cubic feet (.59 cubic yards) of water.
- 2. Handle Bar (Steering)** - When driving the AWD Power Buggy, use both hands and hold onto both handle bar grips. This handle bar is used to steer the buggy.
- 3. Kill Switch** – In the event of an emergency press this button to stop the engine.
- 4. Fuel Tank/Cap** – Remove this cap to add fuel. Tank holds approximately 5.5 U.S. gallons. **DO NOT** over fill.
- 5. Speed Control** – Sets the power buggy's travel speed. When fully depressed, the AWD Power Buggy will be at **FULL** speed. When released the AWD Power Buggy will **STOP**.
- 6. Parking Brake Lever** – When this lever is activated (pulled down) the parking brake will be set. To release the braking pull the lever upwards.
- 7. Travel Lever** – When the travel lever is pushed forward the buggy will travel in the forward direction. Placing the travel lever in the backward position will cause the buggy to travel in the reverse direction. Center position is neutral.
- 8. Brake Pedal** – Press this pedal with the right foot to stop the buggy.
- 9. Operator Platform** - When the buggy is in use, the operator shall **ALWAYS** stand on this platform while holding onto the handle bar (steering).
- 10. Engine** - The AWD Power Buggy uses either a electric or recoil start Briggs & Stratton 18HP Vanguard engine.
- 11. Dump Pedal** - Use this pedal to place the tub in the dump position (vertical), press pedal a second time to return tub to the travel position (horizontal)
- 12. Battery** - Used for electric start of the AWD Power Buggy.
- 13. Forklift Pockets** - When lifting of the buggy is required, use these forklift pockets to lift the AWD Power Buggy. Remember to insert the forks of the fork lift a minimum of 24 inches into power buggy's forklift pockets.
- 14. Dump Control Lever** - Use this lever forward to place the tub in the dump position (vertical), move the lever backward to return the tub to travel position (horizontal)
- 15. Towing Hook** - Use this hook to tow the buggy if it gets stuck. This hook is **NOT** intended for the buggy to be towed on public roads at high speeds.
- 16. Traction Assist Button**- Engaging the traction assist system while in AWD mode provides enhanced traction control.
- 17. AWD/2WD Toggle Switch**- Use when AWD is needed for extended period of time. Toggle the switch to AWD to engage the system.

CAUTION:



The traction assist switch is not intended for extended use. Increased hydraulic temperature may result from extended use of the traction assist system and could damage your AWD Power Buggy

WBH-16EAWD POWER BUGGY — BASIC ENGINE COMPONENTS

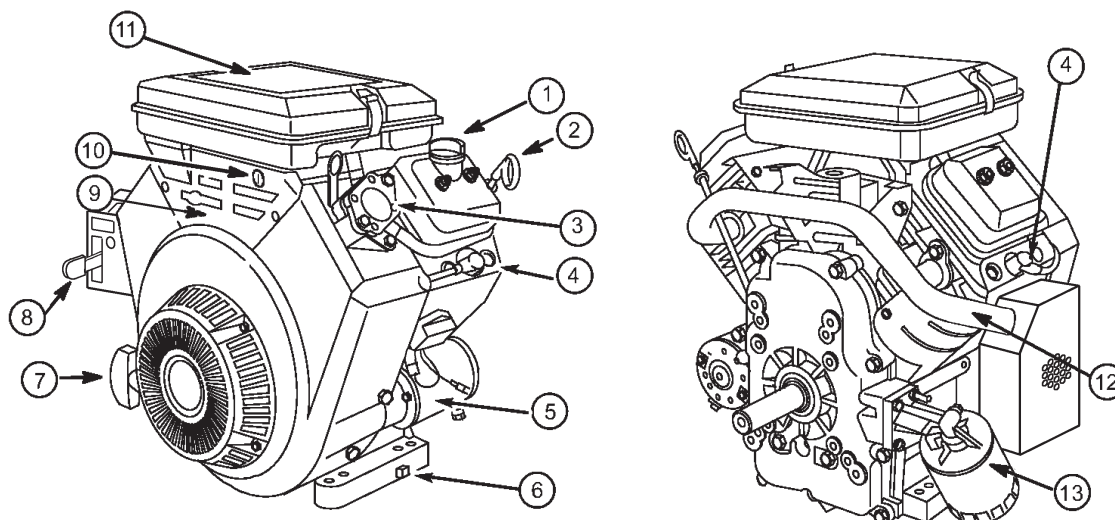


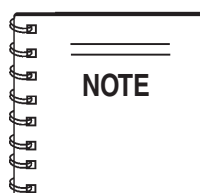
Figure 5. Briggs & Stratton 18HP Vanguard Engine Controls and Components

INITIAL SERVICING

The engine (Figure 5) must be checked for proper lubrication and filled with fuel prior to operation. Refer to the manufacturers Engine manual for instructions & details of operation and servicing.

1. **Oil Fill Cap** – Remove cap to refill or replace oil with recommended type as listed in Table 3. Make sure cap is tightened securely. **DO NOT** over fill.
2. **Oil Dipstick** – Remove to check amount and condition of oil in crankcase.
3. **Fuel Pump** – Draws fuel from the fuel tank into the engine.
4. **Spark Plugs** – Provides spark to the ignition system. Set spark plug gap to 0.70- 0.76 mm (0.028 - 0.030 in.) Clean spark plug once a week.
5. **Electric Starter** – Starts engine when ignition key is rotated to the “ON” position.
6. **Oil Drain Plug** – Remove to drain crankcase oil.
7. **Recoil Starter (pull rope)** – Manual-starting method. Pull the starter grip until resistance is felt, then pull briskly and smoothly.
8. **Throttle Lever** – Used to adjust engine RPM speed (lever advanced forward **SLOW**, lever back toward operator **FAST**).
9. **Choke Lever** – Used in the starting of a cold engine, or in cold weather conditions. The choke enriches the fuel mixture.

10. **Ignition Switch** – Insert the ignition key here to start the engine. Turn the key clockwise to the **ON** position, then continue turning clockwise to the **START** position and release. To stop the engine turn the key fully counter-clockwise to the **STOP** position.



Operating the engine without an air filter, with a damaged air filter, or a filter in need of replacement will allow dirt to enter the engine, causing rapid engine wear.

11. **Air Filter** – Prevents dirt and other debris from entering the fuel system. Release the latches on the sides of the air filter cover to gain access to filter element.



WARNING

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

12. **Exhaust Manifold** – Used to reduce noise and emissions. **NEVER** touch the muffler while it is hot! Serious burns can result. **NEVER** operate the engine with the muffler removed.
13. **Oil Filter** – Prevents dirt and other debris from entering the engine. Service the oil filter as recommended in the maintenance section of this manual.

WBH-16EAWD POWER BUGGY — INSPECTION (ENGINE)

Before Starting

1. Read safety instructions at the beginning of manual.
2. Clean the **AWD POWER BUGGY**, removing dirt and dust, particularly 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.

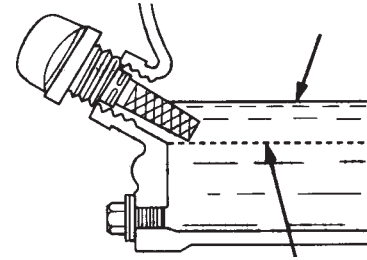


Figure 7. Engine Oil Dipstick (Oil Level)

Engine Oil Check

1. To check the engine oil level, place the saw on secure level ground with the engine stopped, and the diamond blade removed.
2. Remove the filler cap/dipstick from the engine oil filler hole (Figure 6) and wipe it clean.

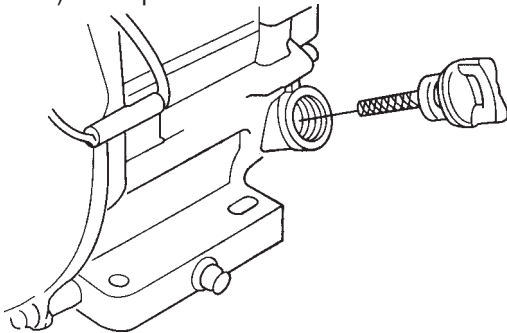
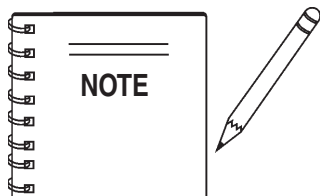


Figure 6. Engine Oil Dipstick (Removal)

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 (Figure 7), fill to the edge of the oil filler hole with the recommended oil type (Table 3). Maximum oil capacity is 3.52 pints.

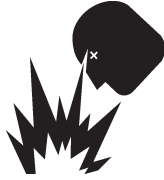
| TABLE 3. OIL TYPE | | |
|-------------------|----------------|---------------|
| Season | Temperature | Oil Type |
| Summer | 25°C or Higher | SAE 10W-30 |
| Spring/Fall | 25°C~10°C | SAE 10W-30/20 |
| Winter | 0°C or Lower | SAE 10W-10 |



Reference manufacturer engine manual for specific servicing instructions.

WBH-16EAWD POWER BUGGY — INSPECTION (BUGGY)

Explosive Fuel



Gasoline Check

1. Remove the gasoline cap (Figure 8) located on top of fuel tank.
2. Visually inspect to see if fuel level is low. If fuel is low, replenish with unleaded fuel.
3. When refueling, be sure to use a strainer for filtration. **DO NOT** top-off fuel. Wipe up any spilled fuel.

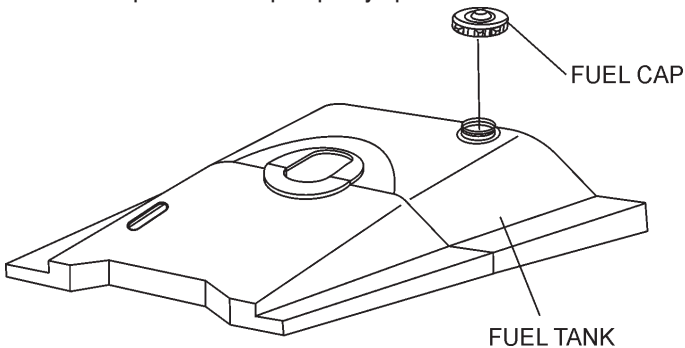


Figure 8. Fuel Tank/Cap

Tire Pressure Check

The wheels and tires of the AWD Power Buggy are very important to its effective operation. Check the tires regularly to make certain the lugs nuts are tight and the tires are inflated to manufacturer's suggested tire pressure. **DO NOT** operate the AWD Power Buggy with bad or worn tires.

Parking Brake Check

Check the power buggy's brakes as outline in the maintenance section of this manual.

Linkage Check

Check and make sure that all the linkage within the AWD Power Buggy is functioning correctly.

Steering Check

Check and make sure that the power buggy's steering turns freely and that there is no binding. Make sure that the zerk fitting for the steering has been lubricated.

Dump Cylinder Check

Check the power buggy's dump cylinder as outline in the operation section of this manual. Make sure that both zerk fittings for the dump cylinder have been lubricated.

Hydraulic Oil Check

1. Visually read the hydraulic sight glass (Figure 9) to see if the hydraulic oil level is low. If the hydraulic oil is low, add enough hydraulic oil to bring oil level to a normal safe operating level.

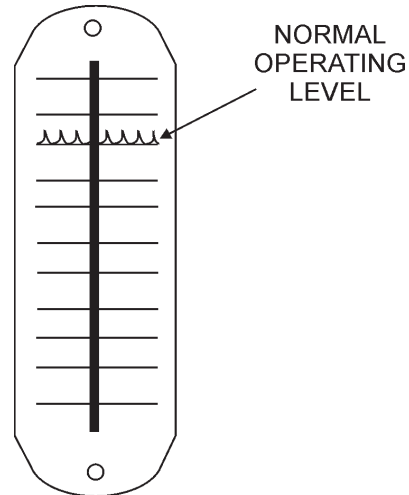


Figure 9. Engine Oil Dipstick (Removal)

WBH-16EAWD POWER BUGGY — INITIAL START-UP

CAUTION:



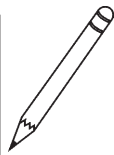
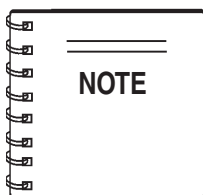
DO NOT attempt to operate the AWD Power Buggy until the Safety, General Information and Inspection sections have been read and understood. The following start-up procedure makes reference to a **BRIGGS AND STRATTON** engine.

ELECTRIC START

1. Before attempting to start the AWD Power Buggy, ensure the safety kill switch (Figure 15) is not pushed in. The AWD Power Buggy will not start with the kill switch engaged.
2. Pull the **Choke Knob** (Figure 10) out to the **CLOSED** position



Figure 10. Choke Knob (Closed Position)



The **CLOSED** position of the choke lever enriches the fuel mixture for starting a **COLD** engine. The **OPEN** position provides the correct fuel mixture for normal operation after starting, and for restarting a warm engine.

3. Move the **throttle lever** (Figure 11) halfway between the **FAST** and **SLOW** position for starting.

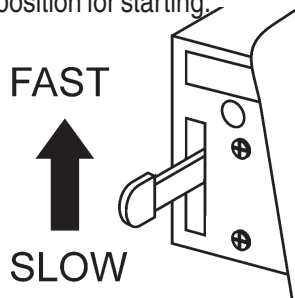


Figure 11. Throttle Lever (Fast Position)

4. Insert the ignition key into the **ignition switch** (Figure 12), turn the key to the **ON** position, then to the **START** position, release the key when the engine starts.

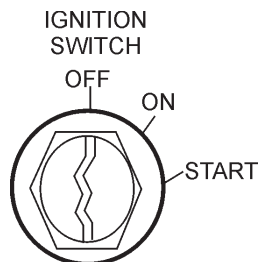


Figure 12. Ignition Switch

5. Push the **Choke Knob** (Figure 13) inward to the **OPEN** position slowly before operating the AWD Power Buggy.



Figure 13. Choke Knob (Open Position)

6. Before the buggy is placed into operation, run the engine for several minutes. Check for fuel leaks, and noises that would associate with a loose guard and/or covers.

RECOIL START

1. Follow steps 1 through 3 of the Electric Start Procedure.
2. Insert the ignition key into the ignition switch (Figure 12), turn the key to the **ON** position.
3. Grasp the starter grip (Figure 14) and slowly pull it out. The resistance becomes the hardest at a certain position, corresponding to the compression point. Pull the starter grip briskly and smoothly for starting.

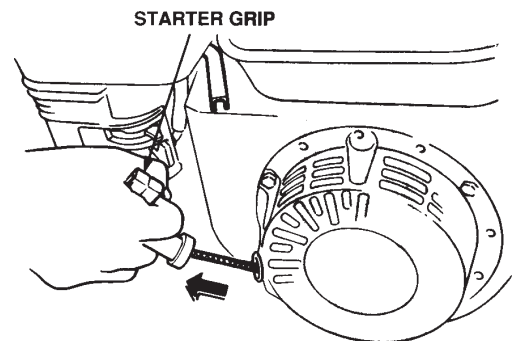


Figure 14. Starter Grip

CAUTION:



- **DO NOT** pull the starter rope all the way to the end.
- **DO NOT** release the starter rope after pulling. Allow it to rewind as soon as possible.

4. If the engine has started, slowly push the choke lever (Figure 13) inward to the **RUN** position. If the engine has not started repeat steps 1 through 3.

WBH-16EAWD POWER BUGGY — SHUT-DOWN PROCEDURE

Shutdown Procedure (Normal)

Correct shutdown is important to safe operation. Follow these general steps:

1. Come to a **FULL** stop.
2. Engage the **parking brake** (Figure 16).
3. Place the **throttle lever** (Figure 11) in the **SLOW** position. Idle engine 3-5 minutes for gradual cooling.
4. Turn the **ignition switch** (Figure 12) to the **OFF** position to shut-down the engine.
5. Cycle hydraulic controls to eliminate residual pressure.
6. Remove **ignition key** on electric start models.
7. Block wheels if on a slope or incline.

Emergency Shutdown Procedure

The AWD Power Buggy is equipped with a safety **kill switch**. This switch is located on the right side of the handle bar (Figure 15).

1. Press the power buggy's **kill switch** (Figure 15) and listen for the engine to stop.
2. Engage the **parking brake** (Figure 16).
3. Turn the **ignition switch** (Figure 12) to the **OFF** position.

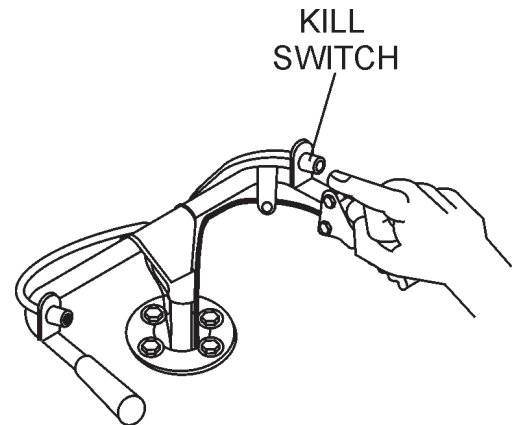


Figure 15. Engine Kill Switch

CAUTION:



NEVER disable or disconnect the kill switch. It is provided for the **operator's safety** and injury may result if it is disabled, disconnected or improperly maintained.

WBH-16EAWD POWER BUGGY — OPERATION

AWD Power Buggy Operation

Checking The Work Area

Inspect the surface over which you will travel. Look for holes, drop-offs and obstacles. Look for rough spots. Look for weak spots on docks, ramps or floor. Look for oil spills, wet spots and slippery surfaces. Look for soft soil, deep mud and standing water. Watch for anything that might make you lose control or cause the Buggy to tip over.

Clear away trash and debris. Pick up anything that might puncture the tires. Make sure aisles, ramps, doorways and passages are clear. Plan your work. Make sure you know where you will make your pickups, dumps and turns. Before you take a load, know where you will place it.

Checking Overhead Obstacles

Check the clearances of doorways, canopies and overheads. Know exactly how much clearance you have under power and telephone cables. Also check clearances when transporting the AWD Power Buggy on a truck or trailer.

WARNING:



NEVER approach **power lines** with any part of the buggy unless all local, state/provincial and federal (OSHA) required safety precautions have been taken. Use extreme **CAUTION!** when approaching high voltage power lines.

Hauling Capacities

Know the rated load capacities of your AWD Power Buggy and never exceed them. **ALWAYS** refer to buggy's rated hauling capacity before loading. Keep in mind that the AWD Power Buggy will normally operate on uneven, unpaved and often very bumpy or inclined surfaces. Operating conditions can reduce the amount that should be carried. **ALWAYS** exercise extreme caution when hauling to avoid tipping of the AWD Power Buggy.

Loading

If possible, plan to load, unload and turn on flat level ground. When you travel with a load, keep the speed reasonable for the load and the terrain to be traveled. The AWD Power Buggy is less stable when traveling with a load.

WARNING

- Avoid sharp turns at high speed.
- If you cannot see where you are going, get someone to direct you
- Watch out for hazardous working conditions. It is your responsibility to evaluate working conditions, and adjust your work operation accordingly to prevent accidents.
- When travelling over soft ground or wet/icy surfaces, slow down.
- Travel only at speeds that permit stopping in a safe manner.
- This is a one-person AWD Power Buggy. **NEVER** permit additional riders to stand on the platform or ride inside the tub.

Transporting

When transporting the Buggy on a truck or trailer, know the overall height to avoid contacting overhead obstructions such as bridges, power lines, etc. Make sure all tie-downs and blocks are in place and the bucket is completely lowered and securely latched. If your Buggy is to be hauled by truck, check the truck and ramp capacities.

Parking

Park your Buggy in a designated area or out-of traffic preferably on level ground.

If parking on a slope or incline, position the AWD Power Buggy at right angles to the slope, set the parking brake, and block the wheels, if required.

WBH-16EAWD POWER BUGGY — OPERATION

AWD Power Buggy Operation

WARNING:



Operator must **ALWAYS** wear the appropriate protective equipment and clothing while operating the AWD Power Buggy.



Pre-Check

1. Engage the **parking brake lever** (Figure 16) and attempt to rock the buggy back and forth.

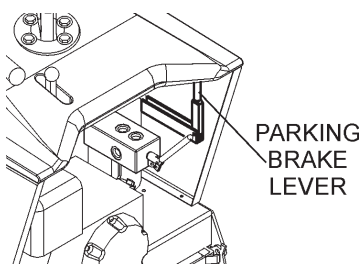


Figure 16. Parking Brake Lever

If the wheels turn during the rocking motion adjust the brakes as outlined in the maintenance section of this manual.

2. Place the **engine's throttle lever** (Figure 11) in the **SLOW** (idle) position.
3. Check the **speed control lever** (Figure 17) located on the right side of the handle bar. The speed control should work freely when squeezed by hand, and return to the closed position when released.

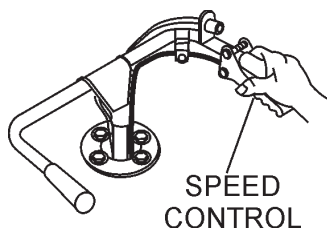


Figure 17. Speed Control Lever

Operation

Parking Brake/Direction Lever

Before the AWD Power Buggy can be put into operational use, it is best to perform a test run to make certain that all components are functioning properly.

1. Place the AWD Power Buggy on flat solid ground.
2. Engage the **parking brake lever**.
3. Place the **engine's throttle control** (Figure 11) in the **SLOW** (idle) position.

4. Place the power buggy's **direction lever** (Figure 18) in the forward direction.

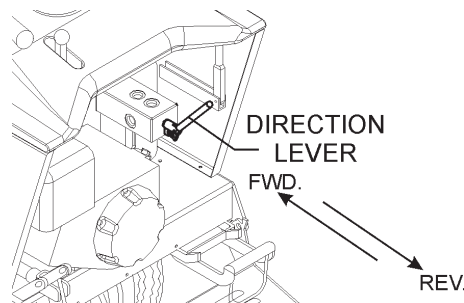


Figure 18. Direction Lever

5. Slowly squeeze the speed control lever slightly (Figure 17), for a short period of time to test the brake holding capacity. If the AWD Power Buggy moves forward, adjust the brakes as outlined in the maintenance section of this manual.
6. If the AWD Power Buggy does not move forward, release the speed control, and disengage the parking brake. If the AWD Power Buggy creeps forward while the parking brake is disengaged, adjust the **pump control lever stop** until the creeping is eliminated.

Traction Assist System Switch

When using the AWD Power Buggy, it might become necessary to engage the traction assist system to provide a temporary boost of traction and power while moving through muddy or rough terrain.

1. Press and hold the traction assist switch (Figure 19) on the left hand side of the handle bar to engage the traction assist system.

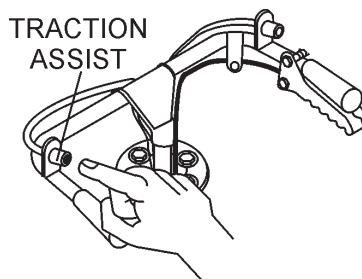


Figure 19. Traction Assist Switch

2. Release the switch to return to normal operation.

WBH-16EAWD POWER BUGGY — OPERATION

All-Wheel Drive (AWD) System

When operating the AWD Power Buggy in rough or uneven terrain, use the AWD/2WD switch (Figure 20) on the right hand side of the operators console.

1. Set the switch to **AWD** to engage and lock the AWD system in place.
2. Set the switch to **2WD** to return the buggy to normal operation.

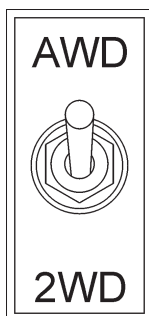


Figure 20. AWD/2WD Switch

Brakes

1. With the engine running and parking brake released, place the **direction lever** (Figure 18) in the **FORWARD** direction.
2. Squeeze the **speed control lever** (Figure 17) slightly until the AWD Power Buggy begins to move in a forward direction. Let the buggy travel at about 3 MPH.
3. With the right foot, step up and place it on the **brake pedal** (Figure 21). Gradually apply pressure to the brake pedal until the buggy comes to rest.

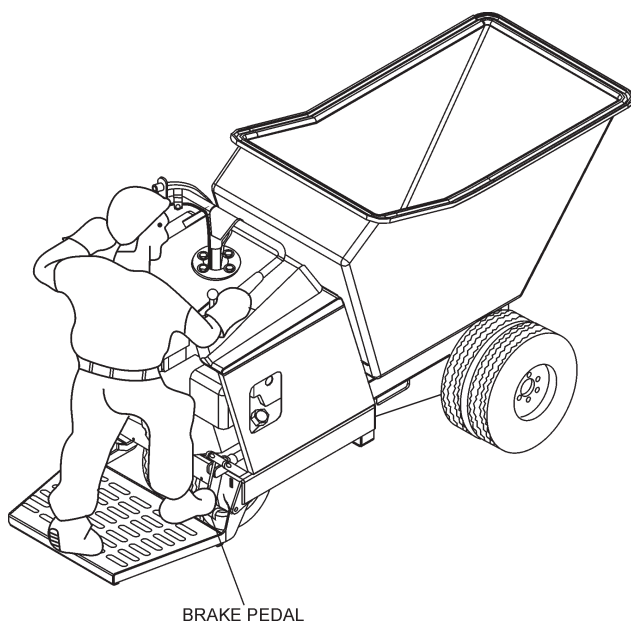


Figure 21. Brake Foot Pedal

4. Try step 3 at different speeds until you are comfortable with stopping the AWD Power Buggy. If the brakes do not seem to stop the AWD Power Buggy adequately, refer to the maintenance section of this manual for brake adjustment instructions.

Tub (Bucket) Dumping

The hydraulic dump (Figure 22) can be controlled by a hand lever or foot pedal.

1. To activate the hydraulic dump, press down on the **dump foot pedal** or move the **dump control lever** forward. The tub will move to the vertical position as long as the lever is held in the forward position or pressure is continuously applied to the dump foot pedal.

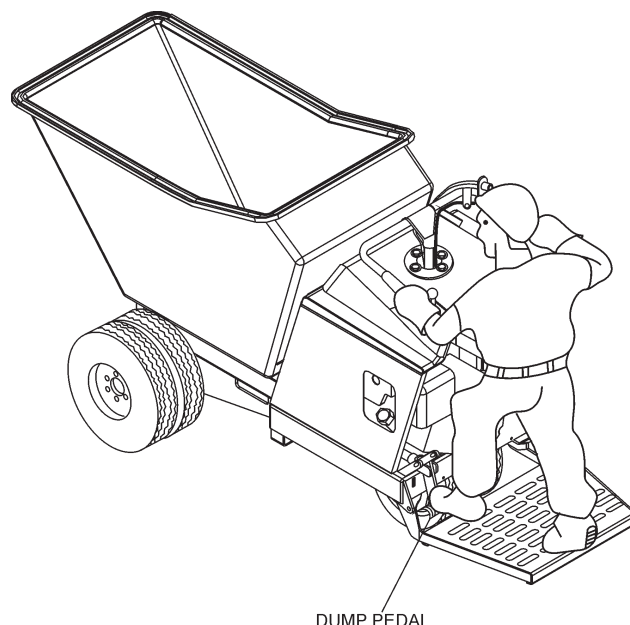
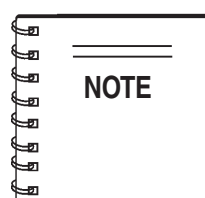


Figure 22. Dump Foot Pedal



Remember when dumping, keep the dump hand lever pushed forward or keep your foot pressed down on the dump foot pedal.

Releasing either one (lever or pedal) will cause the dump cylinder to return to the horizontal position.

2. To return the tub to its horizontal position, simply release the **dump control lever** or remove your foot from the **dump pedal**.

WBH-16EAWD POWER BUGGY — OPERATION

WARNING:



When traveling on inclines (Figure 23), slopes, ramps and downgrades exercise extreme caution. **ALWAYS** make sure you can see the dump site.

Clean-up

Keep work surfaces and engine compartments clean. Clean steps, pedals and floor. Remove any grease or oil. Brush away dirt or mud. During winter conditions, scrape away snow and ice. Remember, slippery surfaces can be hazardous.

Be sure the landing point you intend to use can safely support the load. This may not always be true in the case of scaffolds or hollow floors. If there is any question of overloading, separate the load into two or more loads.

Always use a signal person if you cannot see the placement point. Use caution when placing or travelling near overhead electrical power lines. Water pipes, sprinklers, steam pipes, walkways or other potential hazards. Avoid weakened or incomplete scaffolding. Stay off structurally damaged floors, dock boards and ramps.

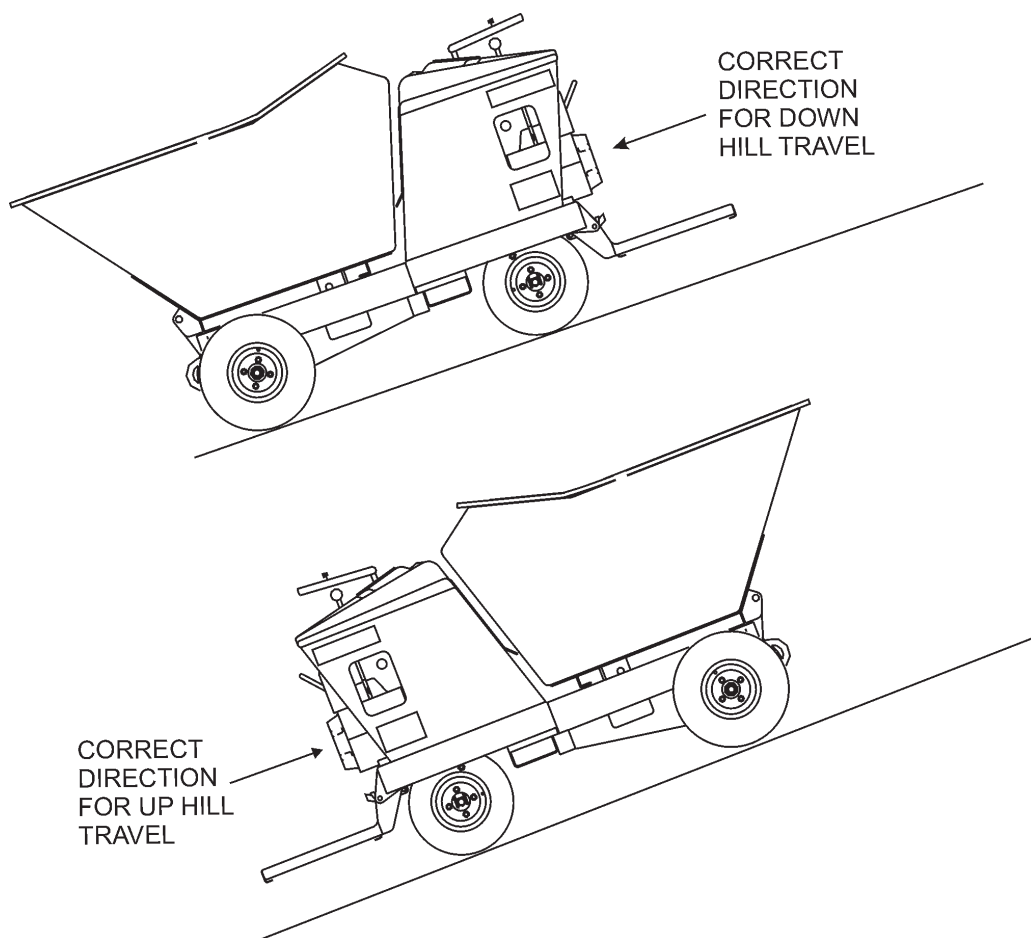


Figure 23. AWD Power Buggy Incline Direction

WBH-16EAWD POWER BUGGY — MAINTENANCE

Engine

Refer to the Briggs and Stratton engine owner's operating manual for specific information.

Check engine oil after every 10 hours of operation and maintain proper levels.

Drain oil after every 50 hours of operation and refill with grade of oil recommended below:

Above 40°F. (13°C.) - S.A.E. 30

Below 40°F. (13°C.) - S.A.E. 20

Adding Hydraulic Oil

Check the hydraulic oil level in the hydraulic oil tank, by reading the hydraulic oil sight glass mounted on the hydraulic oil tank. If the hydraulic oil level is low fill to the proper level with MOBIL 300, GM DEXTRON B, FORD M2C-33F, FORD M2C41A hydraulic oil or equivalent.

1. To gain access to the hydraulic oil filler hole (Figure 24), the dump tub (bucket) must be put in the dump position (vertical). Start the engine as outlined in the starting procedure, then place the tub in the dumping position.

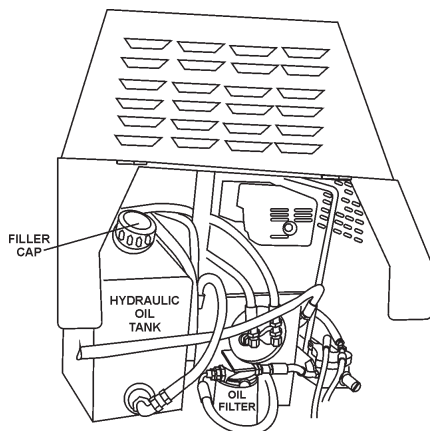
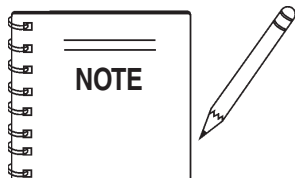


Figure 24. Hydraulic Oil Tank/Cap

2. Use the tub support rod to support the tub, then turn the engine **OFF**. Remove the hydraulic oil filler cap, and add hydraulic oil as required. Fill to the normal operating mark as indicated on the hydraulic oil sight gauge.



In climates where temperatures are below 35°F hard starting may occur. In these cases the hydraulic oil should be switched to a thinner 15 weight hydraulic fluid.

Replace hydraulic oil after every 200 hours of operation. The hydraulic oil filter should be changed each time the hydraulic oil is changed.

Hydraulic Drive Motors

The hydraulic drive motors are extremely reliable and will not need maintenance or repair under normal conditions. Should any problems develop with the hydraulic drive motors, contact Multiquip's service department.

Brake Adjustment

Brake adjustment can be made on the brake linkage rod located on the right-side of the buggy. Place the parking brake lever in the engaged position. The parking brake should be adjusted so that the AWD Power Buggy will not move.

Adjustment is provided by a knob at the end of the parking brake lever, and the adjustment may be tightened by turning the knob counter-clockwise.

Adjust sufficiently tight so that when the parking brake lever is actuated, considerable pressure is required to place it in the over center or **ON** position. With the parking brake engaged, the AWD Power Buggy should not move when the engine is started and the travel lever pushed forward.

Chassis Lubrication

The AWD Power Buggy is equipped with zerk fittings, lubricate these zerk fittings each day before operating the AWD Power Buggy with high grade chassis lubricant at all lubricating points listed below:



- Dump Cylinder Pivots - two zerk fittings
- Tub Bearing Pivot Blocks (underside of tub)- four zerk fittings.
- Steering Bearing Flange (Front side of handle bar) - One zerk fitting.
- Remove rear wheel hubs and repack bearings after every 400 hours of operation.

WBH-16EAWD POWER BUGGY — MAINTENANCE

Tires/Wheels/Lug Nuts

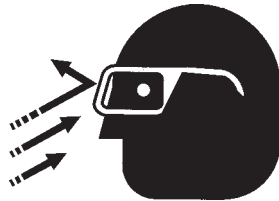
Tires and wheels are a very important and critical components of the trailer. When specifying or replacing the trailer wheels it is important the wheels, tires, and axle are properly matched.

CAUTION:

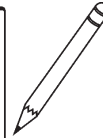
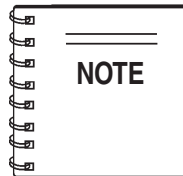
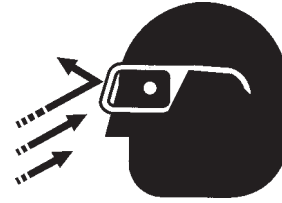


DO NOT attempt to repair or modify a wheel. **DO NOT** install an inter-tube to correct a leak through the rim. If the rim is cracked, the air pressure in the inter-tube may cause pieces of

the rim to explode (break-off) with great force and can cause serious eye or bodily injury.



CAUTION:









ALWAYS wear safety glasses when removing or installing force fitted parts. Failure to comply may result in serious injury.

Tires Wear/Inflation

Tire inflation pressure is the most important factor in tire life. Pressure should be checked cold before operation. **DO NOT** bleed air from tires when they are hot. Check inflation pressure weekly during use to insure the maximum tire life and tread wear.

Table 4 (Tire Wear Troubleshooting) will help pinpoint the causes and solutions of tire wear problems.

| TABLE 4. TIRE WEAR TROUBLESHOOTING | | | |
|---|---------------------------------|---|--|
| WEAR PATTERN | CAUSE | SOLUTION | |
|  Center Wear | Over Inflation | Adjust pressure to particular load per tire manufacturer. | |
|  Edge Wear | Under Inflation | Adjust pressure to particular load per tire manufacturer. | |
|  Side Wear | Loss of chamber or overloading. | Make sure load does not exceed axle rating. Align wheels. | |
|  Toe Wear | Incorrect toe-in | Align wheels. | |
|  Cupping | Out-of balance | Check bearing adjustment and balance tires. | |
|  Flat Spots | Wheel lockup & tire skidding. | Avoid sudden stops when possible and adjust brakes. | |

Lug Nut Torque Requirements

It is extremely important to apply and maintain proper wheel mounting torque on the trailer. Be sure to use only the fasteners matched to the cone angle of the wheel. Proper procedure for attachment of the wheels is as follows:

1. Start all wheel lug nuts by hand.
2. Torque all lug nuts in sequence. See Figure 25. **DO NOT** torque the wheel lug nuts all the way down. Tighten each lug nut in 3 separate passes as defined by Table 5.

TABLE 5. TIRE TORQUE REQUIREMENTS

| Wheel Size | First Pass FT-LBS | Second Pass FT-LBS | Third Pass FT-LBS |
|-------------|-------------------|--------------------|-------------------|
| 480 x 8 in. | 20-25 | 35-40 | 50-65 |

3. After first road use, retorque all lug nuts in sequence (Figure 25). Check all wheel lug nuts periodically.

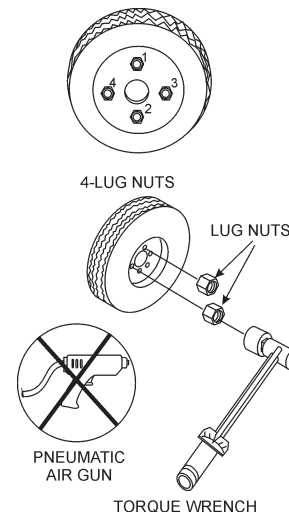


Figure 25. Lug Nut Torque Sequence

WBH-16EAWD POWER BUGGY — TROUBLESHOOTING (BUGGY)

Practically all breakdowns can be prevented by proper handling and maintenance inspections, but in the event of a breakdown, refer to **Table 6** (Power Buggy Troubleshooting) as a basic guideline for troubleshooting the AWD Power Buggy. If the problem cannot be remedied, contact Multiquip's Buisness Office or Service Department

TABLE 6. POWER BUGGY TROUBLESHOOTING

| SYMPTOM | POSSIBLE PROBLEM | SOLUTION |
|------------------------------|---|--|
| Loss of power. | Speed control cable out of adjustment? | Adjust speed control cable. Replace cable if necessary |
| | Hydraulic oil level low.? | Check hydraulic oil level. Add oil if necessary. |
| | Contaminated hydraulic oil filter? | Replace hydraulic oil filter. |
| | Low engine RPM? | Check engine speed. |
| Loss of travel. | Forward/Reverse lever in neutral position? | Place lever in either forward or reverse position. Check hydraulic motors. |
| | Parking brake partially engaged? | Release parking brake. |
| System operating hot. | Hydraulic oil level low? | Check hydraulic oil level add hydraulic oil if necessary. |
| | Defective cooling fan? | Inspect cooling fan, replace if necessary. |
| Slow Dumping. | Low engine speed? | Check engine speed. Adjust engine speed if necessar.y |
| | Dump cylinder is internally by-passing oil? | Replace dump cylinder. |
| System jerky when started. | Speed cable out of adjustment? | Adjust speed control cable. |
| | Defective drive motors? | Check drive motors, replace if necessary. |
| Difficult to steer. | Un-lubricated steering column? | Lubricate steering column. |
| Parking brake will not hold. | Brake linkage out of adjustment?. | Adjust parking brake linkage. |
| Difficulty in stopping. | Brakes out of adjustment? | Brake lining worn. Replace brake lining. |
| Engine will not start. | Low on fuel or fuel tank empty? | Add fuel. |
| | Defective Kill Switch? | Check electrical kill switch. Replace if necessary |
| | Engine ON/OFF switch in OFF position? | Set engine ON/OFF switch to ON position. |
| | Fuel Shut-off valve CLOSED? | Open Fuel shut-off valve. |

WBH-16EAWD POWER BUGGY — TROUBLESHOOTING (ENGINE)

Practically all breakdowns can be prevented by proper handling and maintenance inspections, but in the event of a breakdown, refer to **Table 7** (Engine Troubleshooting) as a basic guideline for troubleshooting the AWD Power Buggy's engine. If the problem cannot be remedied, contact Multiquip's Business Office or Service Department

TABLE 7. ENGINE TROUBLESHOOTING

| SYMPTON | POSSIBLE CAUSE | SOLUTION |
|---|---|--|
| Difficult to start, "fuel is available, but no SPARK at spark plug". | Spark plug bridging? | Check gap, insulation or replace spark plug. |
| | Carbon deposit on spark plug? | Clean or replace spark plug. |
| | Short circuit due to deficient spark plug insulation? | Check spark plug insulation, replace if worn. |
| | Improper spark plug gap? | Set to proper gap. |
| Difficult to start, "fuel is available, and SPARK is present at the spark plug". | Console or engine ON/OFF switch is shorted? | Check switch wiring, replace switch. |
| | Ignition coil defective? | Replace ignition coil. |
| | Improper spark gap, points dirty? | Set correct spark gap and clean points. |
| | Condenser insulation worn or short circuiting? | Replace condenser. |
| | Spark plug wire broken or short circuiting? | Replace defective spark plug wiring. |
| Difficult to start, "fuel is available, spark is present and compression is normal" | Wrong fuel type? | Flush fuel system, and replace with correct type of fuel. |
| | Water or dust in fuel system? | Flush fuel system. |
| | Air cleaner dirty? | Clean or replace air cleaner. |
| Difficult to start, "fuel is available, spark is present and compression is low" | Suction/exhaust valve stuck or protruded? | Re-seat valves. |
| | Piston ring and/or cylinder worn? | Replace piston rings and or piston. |
| | Cylinder head and/or spark plug not tightened properly? | Torque cylinder head bolts and spark plug. |
| | Head gasket and/or spark plug gasket damaged? | Replace head and spark plug gaskets. |
| No fuel present at carburetor. | Fuel not available in fuel tank? | Fill with correct type of fuel. |
| | Fuel cock does not open properly? | Apply lubricant to loosen fuel cock lever, replace if necessary. |
| | Fuel filter clogged? | Replace fuel filter. |
| | Fuel tank cap breather hole clogged? | Clean or replace fuel tank cap. |
| | Air in fuel line? | Bleed fuel line. |

WBH-16EAWD POWER BUGGY — TROUBLESHOOTING (ENGINE)

TABLE 7. ENGINE TROUBLESHOOTING (CONTINUED)

| SYMPTON | POSSIBLE CAUSE | SOLUTION |
|---|--|---|
| "Weak in power" compression is proper and does not misfire. | Air cleaner not clean? | Clean or replace air cleaner |
| | Improper level in carburetor? | Check float adjustment, re-build carburetor. |
| | Defective Spark plug? | Clean or replace spark plug. |
| | Defective Spark plug? | |
| "Weak in power" compression is proper but misfires. | Water in fuel system? | Flush fuel system, and replace with correct type of fuel. |
| | Dirty spark plug? | Clean or replace spark plug. |
| | Ignition coil defective? | Replace ignition coil. |
| Engine overheats. | Spark plug heat value improper? | Replace with correct type of spark plug. |
| | Correct type of fuel? | Replace with correct type of fuel |
| | Cooling fins dirty? | Clean cooling fins. |
| Rotational speed fluctuates. | Governor adjusted correctly? | Adjust governor. |
| | Governor spring defective? | Replace governor spring. |
| | Fuel flow restricted? | Check entire fuel system for leaks or clogs. |
| Recoil starter malfunction. | Recoil mechanism clogged with dust and dirt? | Clean recoil assembly with soap and water. |
| | Spiral spring loose? | Replace spiral spring. |

WBH-16EAWD POWER BUGGY — HYDRAULIC SYSTEM DIAGRAM

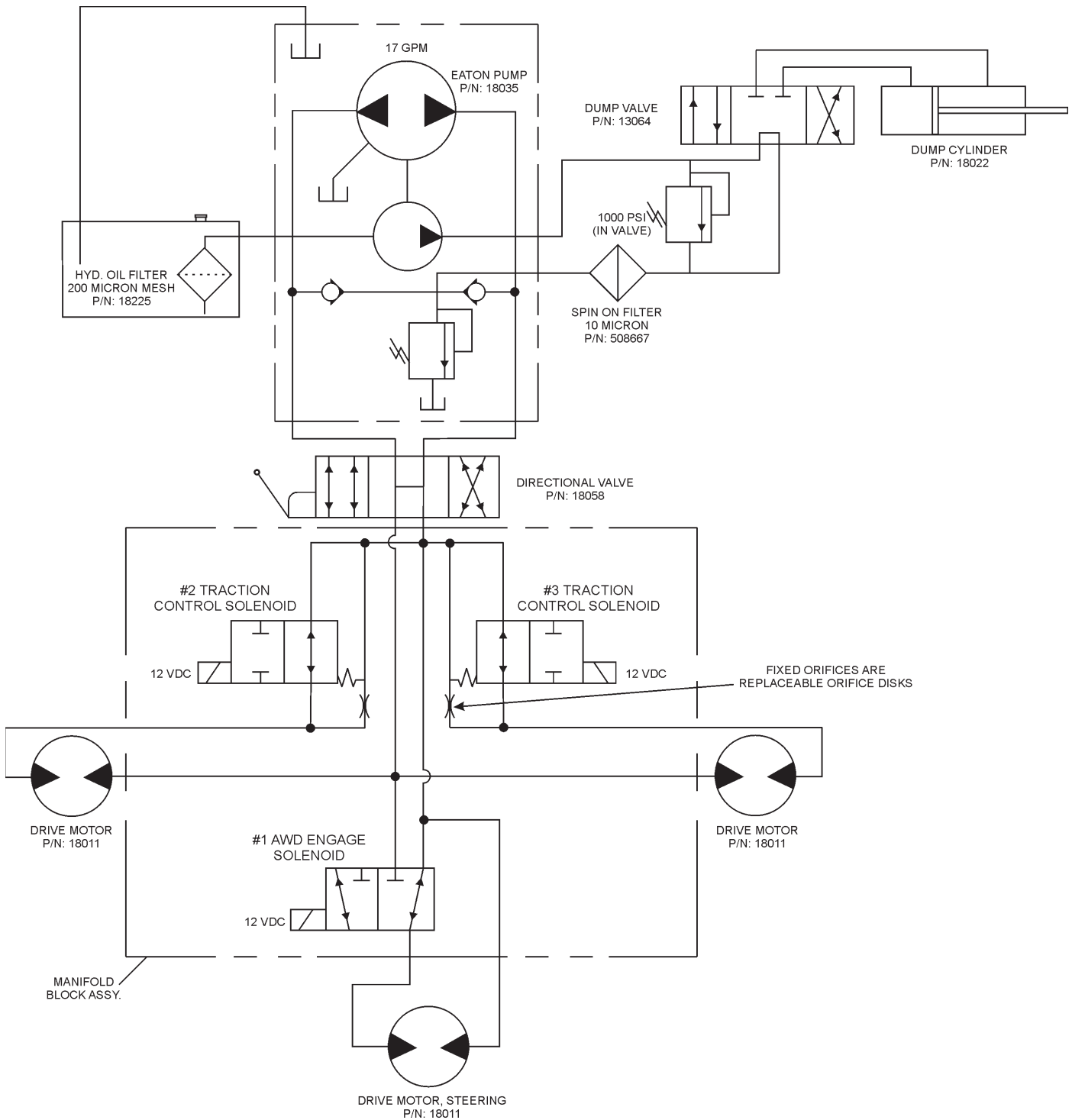
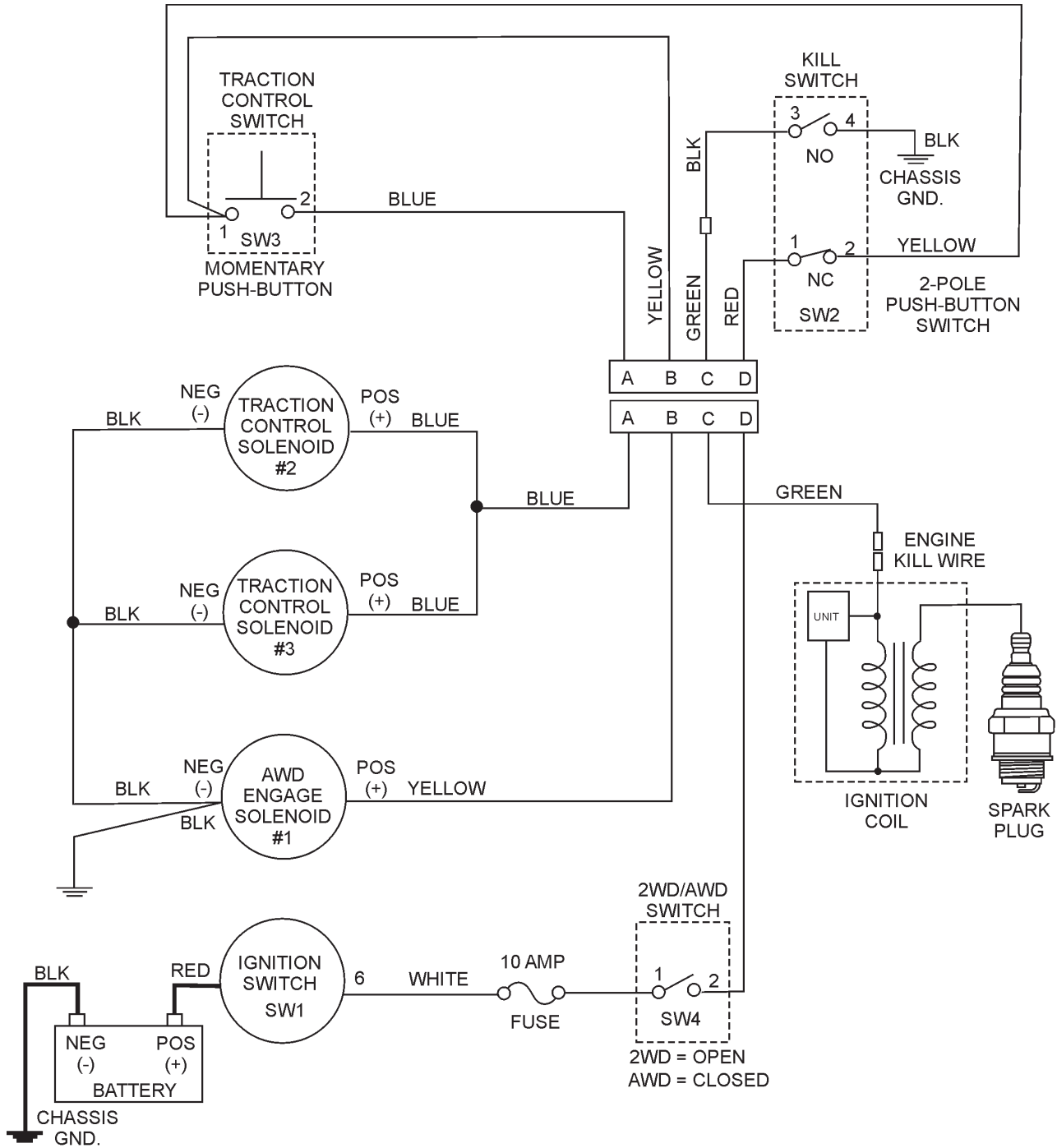


Figure 26. Hydraulic System Diagram

WBH-16EAWD POWER BUGGY — ELECTRIC WIRING DIAGRAM



NOTES:

1. WHEN 2WD/AWD SWITCH(SW4) IS OPEN, UNIT WILL OPERATE IN 2WD MODE ONLY.
2. WHEN 2WD/AWD SWITCH IS PLACED IN THE AWD POSITION (CLOSED), +12VDC WILL BE SUPPLIED TO THE AWD SOLENOID #1 AND TO THE TRACTION CONTROL MOMENTARY PUSH-BUTTON SWITCH (SW3). NOTE KILL SWITCH MUST BE IN THE PULLED- OUT POSITION (CONTACTS 1 AND 2 CLOSED)
3. PRESSING THE TRACTION CONTROL MOMENTARY SWITCH (SW3) WILL ACTIVATE TRACTION CONTROL SOLENOIDS 2 AND 3.
4. ALL WIRES ARE 12 AWG. UNLESS OTHERWISE SPECIFIED

Figure 27. Electric Wiring Diagram

WBH-16EAWD POWER BUGGY — HYDRAULIC HOSE CONNECTIONS

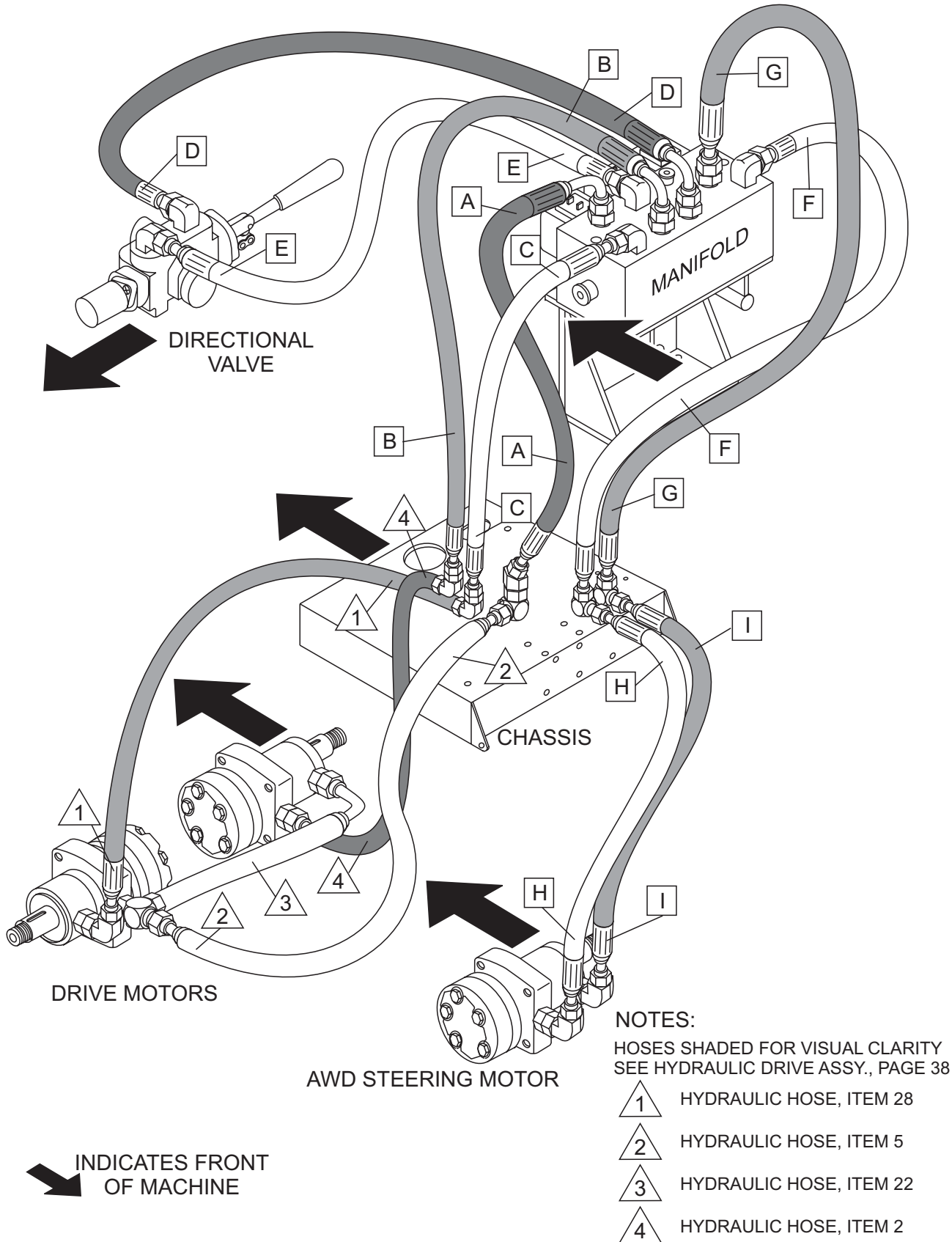


Figure 28. Hydraulic Hose Connections

WBH-16EAWD POWER BUGGY — EXPLANATION OF CODE IN REMARKS COLUMN

The following section explains the different symbols and remarks used in the Parts section of this manual. Use the help numbers found on the back page of the manual if there are any questions.

The contents and part numbers listed in the parts section are subject to change **without notice**. Multiquip does not guarantee the availability of the parts listed.

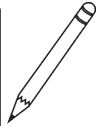
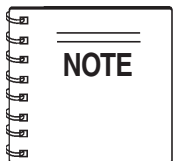
Sample Parts List:

| NO. | PART NO. | PART NAME | QTY. | REMARKS |
|-----|----------|----------------------|--------|---------------------|
| 1 | 12345 | BOLT | 1 | INCLUDES ITEMS W/* |
| 2* | | WASHER, 1/4 IN. | | NOT SOLD SEPARATELY |
| 2* | 12347 | WASHER, 3/8 IN. | 1 | MQ-45T ONLY |
| 3 | 12348 | HOSE | A/R .. | MAKE LOCALLY |
| 4 | 12349 | BEARING | 1 | S/N 2345B AND ABOVE |

NO. Column

Unique Symbols - All items with same unique symbol (*, #, +, %, or >) in the number column belong to the same assembly or kit, which is indicated by a note in the “Remarks” column.

Duplicate Item Numbers - Duplicate numbers indicate multiple part numbers are in effect for the same general item, such as different size saw blade guards in use or a part that has been updated on newer versions of the same machine.



When ordering a part that has more than one item number listed, check the remarks column for help in determining the proper part to order.

PART NO. Column

Numbers Used - Part numbers can be indicated by a number, a blank entry, or TBD.

TBD (To Be Determined) is generally used to show a part that has not been assigned a formal part number at time of publication.

A blank entry generally indicates that the item is not sold separately or is not sold by Multiquip. Other entries will be clarified in the “Remarks” Column.

QTY. Column

Numbers Used - Item quantity can be indicated by a number, a blank entry, or A/R.

A/R (As Required) is generally used for hoses or other parts that are sold in bulk and cut to length.

A blank entry generally indicates that the item is not sold separately. Other entries will be clarified in the “Remarks” Column.

REMARKS Column

Some of the most common notes found in the “Remarks” Column are listed below. Other additional notes needed to describe the item can also be shown.

Assembly/Kit - All items on the parts list with the same unique symbol will be included when this item is purchased.

Indicated by:

“INCLUDES ITEMS W/(unique symbol)”

Serial Number Break - Used to list an effective serial number range where a particular part is used.

Indicated by:

“S/N XXXXX AND BELOW”

“S/N XXXX AND ABOVE”

“S/N XXXX TO S/N XXX”

Specific Model Number Use - Indicates that the part is used only with the specific model number or model number variant listed. It can also be used to show a part is NOT used on a specific model or model number variant.

Indicated by:

“XXXXX ONLY”

“NOT USED ON XXXX”

“Make/Obtain Locally” - Indicates that the part can be purchased at any hardware shop or made out of available items. Examples include battery cables, shims, and certain washers and nuts.

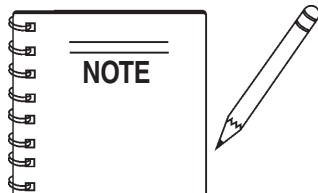
“Not Sold Separately” - Indicates that an item cannot be purchased as a separate item and is either part of an assembly/kit that can be purchased, or is not available for sale through Multiquip.

WBH-16EAWD POWER BUGGY — SUGGESTED SPARE PARTS

WBH-16EAWD POWER BUGGY

1 to 3 Units

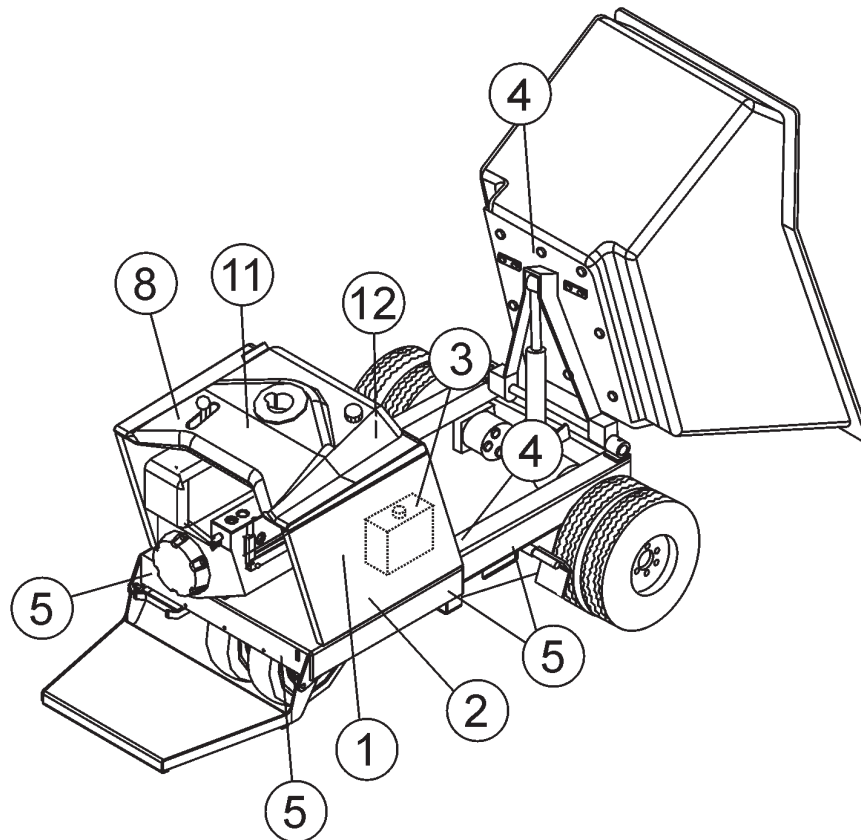
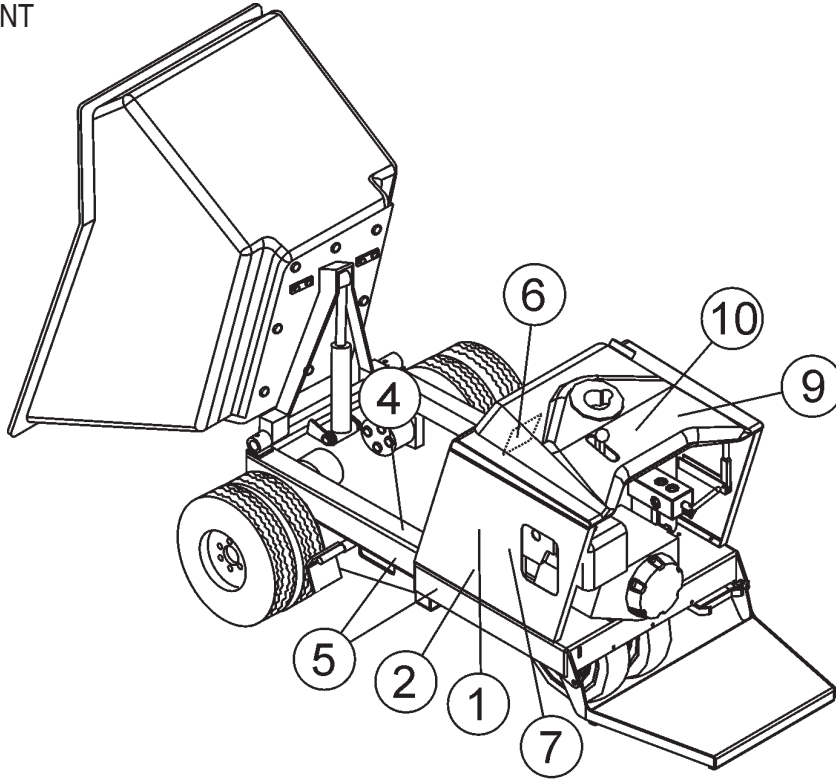
| <u>QTY.</u> | <u>PART NO.</u> | <u>PART NAME</u> |
|-------------|-----------------|-------------------------|
| 1 | 508667 | FILTER, HYDRAULIC OIL |
| 1 | 18035 | PUMP, HYDROSTATIC |
| 1 | 511719 | COUPLING, ENGINE SHAFT |
| 2 | 18316 | LINING, BRAKE |
| 1 | 18145 | ROD, BRAKE CONTROL |
| 1 | 18166 | CAP, FUEL |
| 5 | 20763 | FILTER, IN-LINE FUEL |
| 1 | 18043 | SWITCH, KILL |
| 1 | 18133 | CABLE, THROTTLE |
| 1 | 18132 | LEVER, THROTTLE |
| 1 | 18029 | WHEEL, DRIVE |
| 1 | 18049 | WHEEL, STEERING |
| 1 | 18016 | CABLE, PARKING BRAKE |
| 1 | 18044 | SWITCH, TRACTION ASSIST |



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

WBH-16EAWD POWER BUGGY — DECAL PLACEMENT

DECAL PLACEMENT



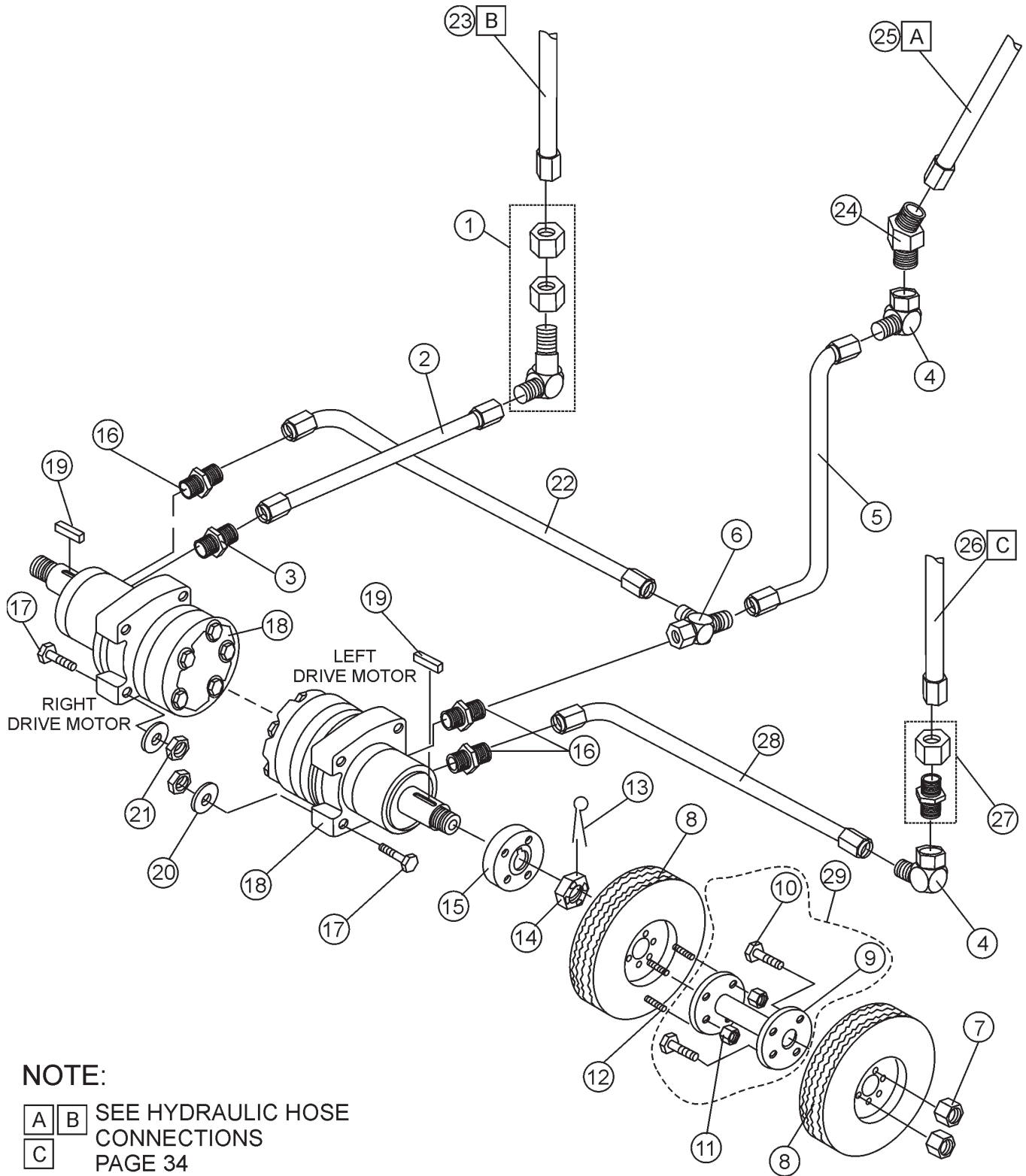
WBH-16EAWD POWER BUGGY — DECAL PLACEMENT

DECAL PLACEMENT

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|---|-------------|-------------------------|
| 1 | TBD | DECAL, WPB-16 | 2 | |
| 2 | 18252 | DECAL, MQ WHITEMAN | 2 | |
| 3 | EM985 | DECAL, HYDRAULIC OIL | 1 | |
| 4 | 513608 | DECAL, LIFTING HOOK | 3 | |
| 5 | 18245 | DECAL, FORKLIFT LIFTING | 6 | |
| 6 | 18247 | DECAL, CRUSH WARNING | 1 | |
| 7 | 18248 | DECAL, HOT SURFACE WARNING | 1 | |
| 8 | 18213 | DECAL, BUCKET DUMP LEVER | 1 | PART OF FUEL TANK COVER |
| 9 | 18214 | DECAL, TRAVEL LEVER DIRECTION | 1 | PART OF FUEL TANK COVER |
| 10 | 513609 | PLATE, AWD/2WD DRIVE MODE | 1 | PART OF FUEL TANK COVER |
| 11 | 18195 | DECAL, WHITEMAN SAFTEY INSTRUCTIONS ... | 1 | PART OF FUEL TANK COVER |
| 12 | 18225 | DECAL, GASOLINE ONLY | 1 | PART OF FUEL TANK |

WBH-16EAWD POWER BUGGY — HYDRAULIC DRIVE ASSY.

HYDRAULIC DRIVE ASSY.



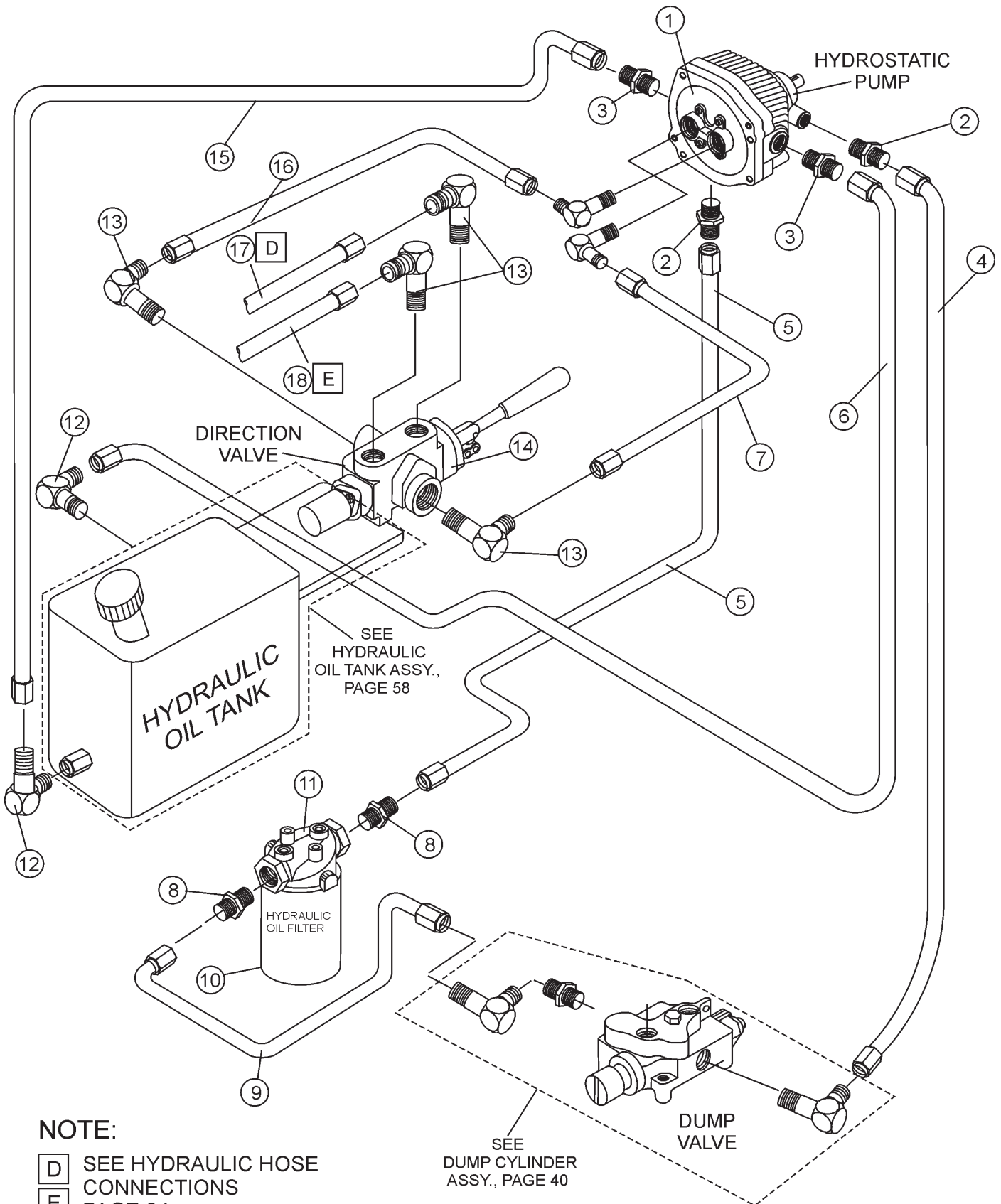
WBH-16EAWD POWER BUGGY — HYDRAULIC DRIVE ASSY.

HYDRAULIC DRIVE ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|--------------------------------|-------------|--------------------|
| 1 | 511810 | ADAPTER, STRAIGHT ASSY | 1 | |
| 2 | 513606 | HOSE, RH HYDRAULIC MOTOR | 1 | |
| 3 | 3365 | ADAPTER, STRAIGHT | 2 | |
| 4 | 512201 | ADAPTER, ELBOW | 2 | |
| 5 | 513605 | HOSE, LH HYDRAULIC MOTOR | 1 | |
| 6 | 512189 | ADAPTER, T - CONNECTOR | 2 | |
| 7 | 492527 | NUT, HEX 1/2-20 | 8 | |
| 8 | 18029 | WHEEL, DRIVE ASSY. FRONT | 4 | |
| 9* | 511692 | FLANGE, HUB | 2 | |
| 10* | 18237 | LUG BOLT/HUB FLANGE | 8 | |
| 11 | 492584 | NUT, HEX 1/2-13 NYLON | 8 | |
| 12 | 18190 | SCREW, HUB STUD 1/2-20 X 2-3/4 | 8 | |
| 13 | 491689 | KEY, COTTER 1/8 X 2 | 2 | |
| 14 | PT018038 | NUT, CASTLE 1-1/8-18 | 2 | |
| 15 | 18040 | HUB, DRIVE | 2 | |
| 16 | 3365 | ADAPTER, STRAIGHT | 5 | |
| 17 | 505718 | SCREW, HHC 1/2-13 X 2-3/4 | 8 | |
| 18 | 18011 | MOTOR, HYDRAULIC DRIVE | 2 | |
| 19 | PE449105 | KEY, WOODRUFF 1-1/4 32 MM | 2 | |
| 20 | 492600 | WASHER, FLAT 1/2 | 8 | |
| 21 | 492584 | NUT, NYLOC 1/2-13 | 8 | |
| 22 | 18027 | HOSE, DRIVER MOTOR CROSSOVER | 1 | |
| 23 | 513602 | HOSE, MANIFOLD | 1 | |
| 24 | 513547 | ADAPTOR, ELBOW | 1 | |
| 25 | 513601 | HOSE, MANIFOLD | 1 | |
| 26 | 513603 | HOSE, MANIFOLD | 1 | |
| 27 | 512202 | ADAPTOR, STRAIGHT ASSY. | 1 | |
| 28 | 513607 | HOSE, HYDRAULIC | 1 | |
| 29 | 516528 | FLANGE HUB, ASSY. | 1 | INCLUDES ITEMS W/* |

WBH-16EAWD POWER BUGGY — HYDRAULIC PUMP ASSY.

HYDRAULIC PUMP ASSY.



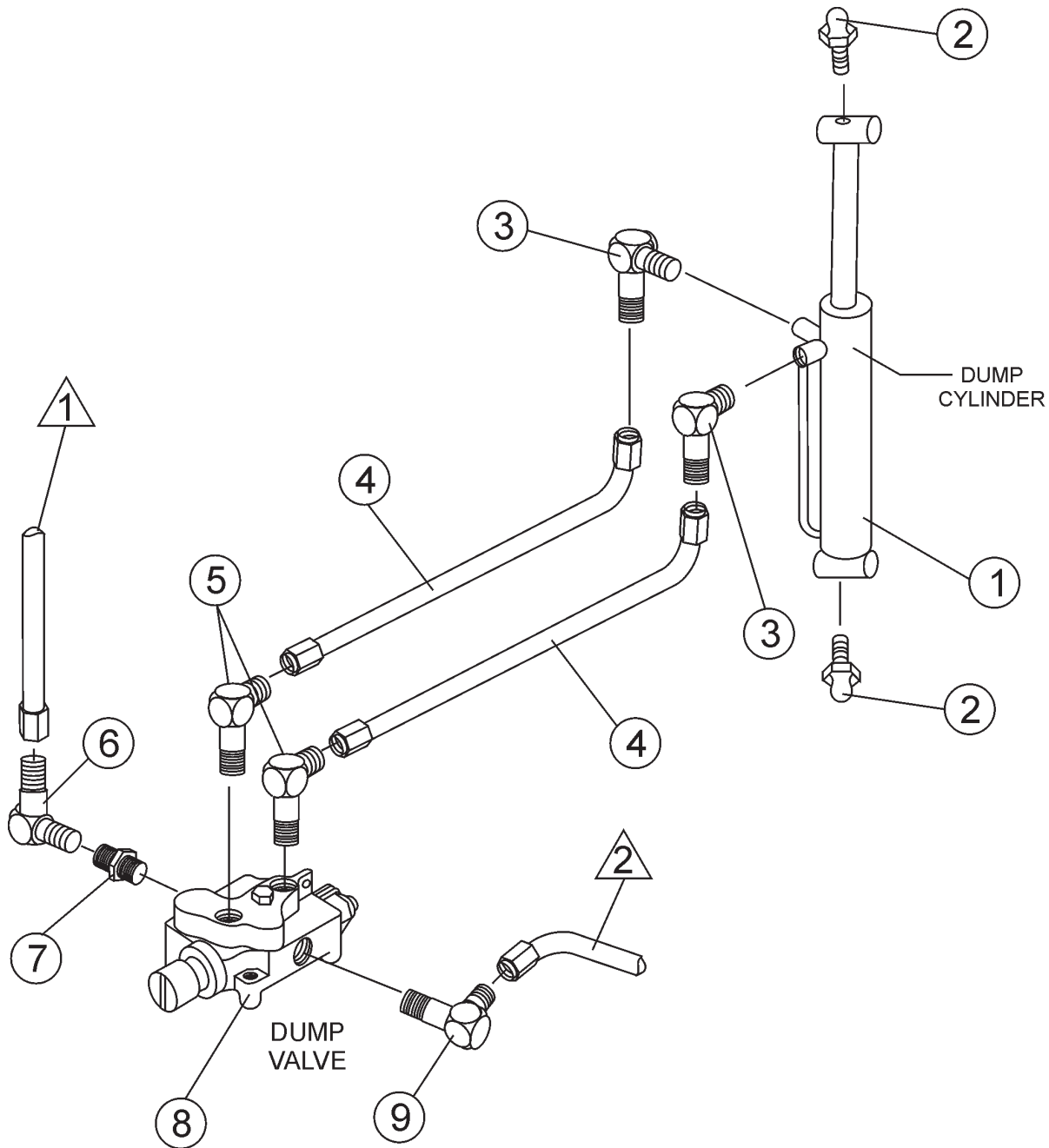
WBH-16EAWD POWER BUGGY — HYDRAULIC PUMP ASSY.

HYDRAULIC PUMP ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|-------------------------------|-------------|----------------|
| 1 | 18035 | PUMP, HYDRAULIC | 1 | |
| 2 | 511808 | ADAPTER, STRAIGHT | 2 | |
| 3 | 3365 | ADAPTER, STRAIGHT | 6 | |
| 4 | 18256M | HOSE, PUMP TO DUMP VALVE | 1 | |
| 5 | 18258M | HOSE, FILTER TO PUMP | 1 | |
| 6 | 18261M | HOSE, PUMP TO TANK | 1 | |
| 7 | 513599 | HOSE, PUMP TO DIREC. VALVE | 1 | |
| 8 | 512190 | ADAPTER, STRAIGHT | 2 | |
| 9 | 18257M | HOSE, FILTER TO DUMP VALVE | 1 | |
| 10 | 508667 | FILTER | 1 | |
| 11 | 508664 | SUPPORT, FILTER | 1 | |
| 12 | 511799 | ADAPTER, ELBOW | 2 | |
| 13 | 3322 | ADAPTER, ELBOW | 6 | |
| 14 | 18058 | VALVE, DIRECTION CONTROL | 1 | |
| 15 | 18262M | HOSE, TANK TO PUMP | 1 | |
| 16 | 18266M | HOSE, PUMP TO DIRECTION VALVE | 1 | |
| 17 | 513598 | HOSE, MANIFOLD | 1 | |
| 18 | 18265M | HOSE, MANIFOLD | 1 | |

WBH-16EAWD POWER BUGGY — DUMP CYLINDER ASSY.

DUMP CYLINDER ASSY.



NOTES:

① HYDRAULIC PUMP ASSY.
CONNECT TO ITEM 11, PAGE 42

② HYDRAULIC PUMP ASSY.
CONNECT TO ITEM 1, PAGE 42

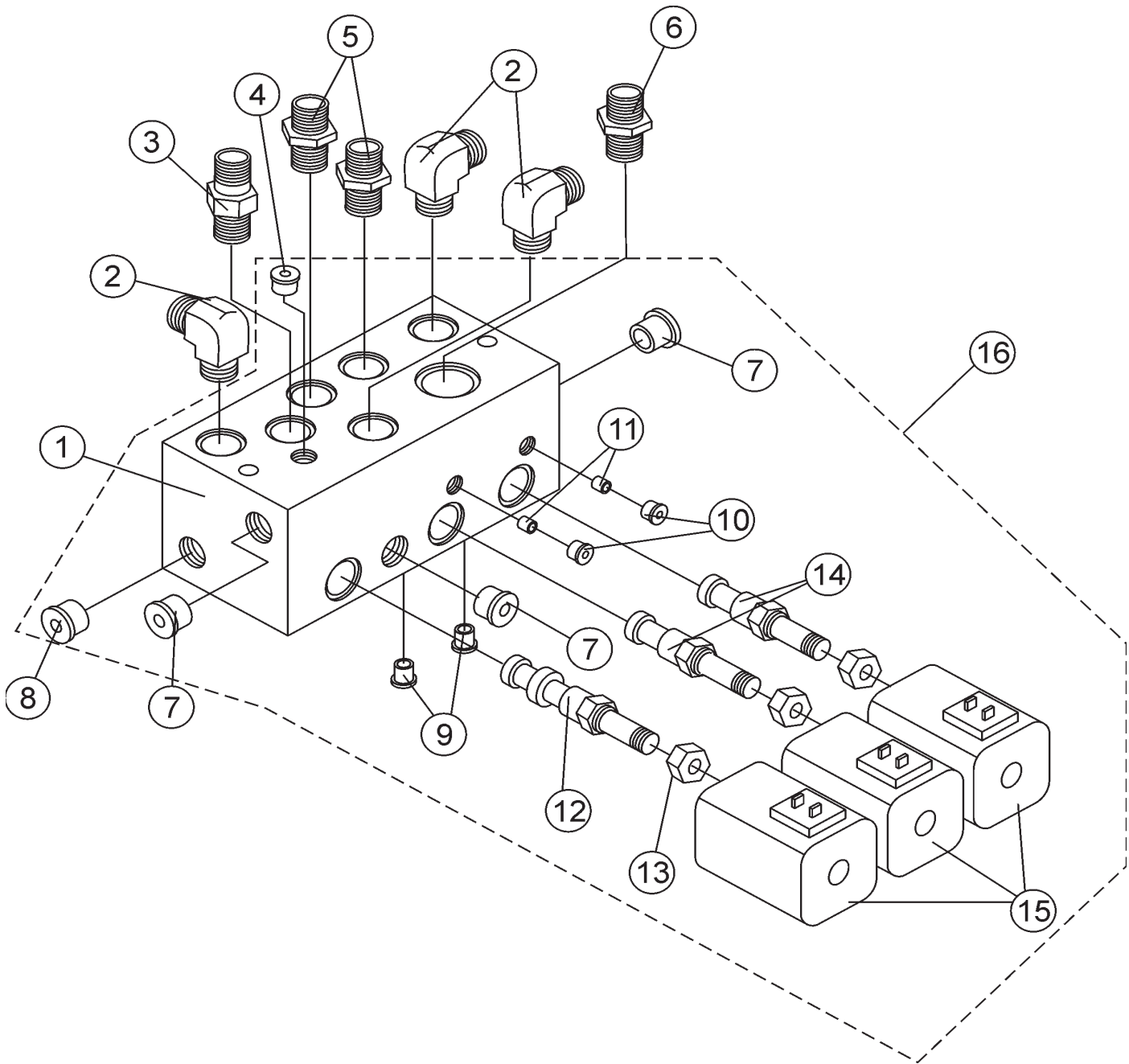
WBH-16EAWD POWER BUGGY — DUMP CYLINDER ASSY

DUMP CYLINDER ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|---------------------------------|-------------|----------------|
| 1 | 18022 | PISTON, HYD. DUMP | 1 | |
| 2 | 491705 | ZERK FITTING | 2 | |
| 3 | 511803 | ADAPTER, ELBOW | 2 | |
| 4 | 18020 | HOSE, DUMP VALVE TO HYD. PISTON | 2 | |
| 5 | 511804 | ADAPTER, STRAIGHT | 2 | |
| 6 | 512234 | ADAPTER, ELBOW | 1 | |
| 7 | 511806 | ADAPTER, STRAIGHT | 1 | |
| 8 | 18064 | VALVE, DUMP | 1 | |
| 9 | 506191 | ADAPTER, ELBOW | 1 | |

WBH-16EAWD POWER BUGGY — MANIFOLD ASSY.

MANIFOLD ASSY.



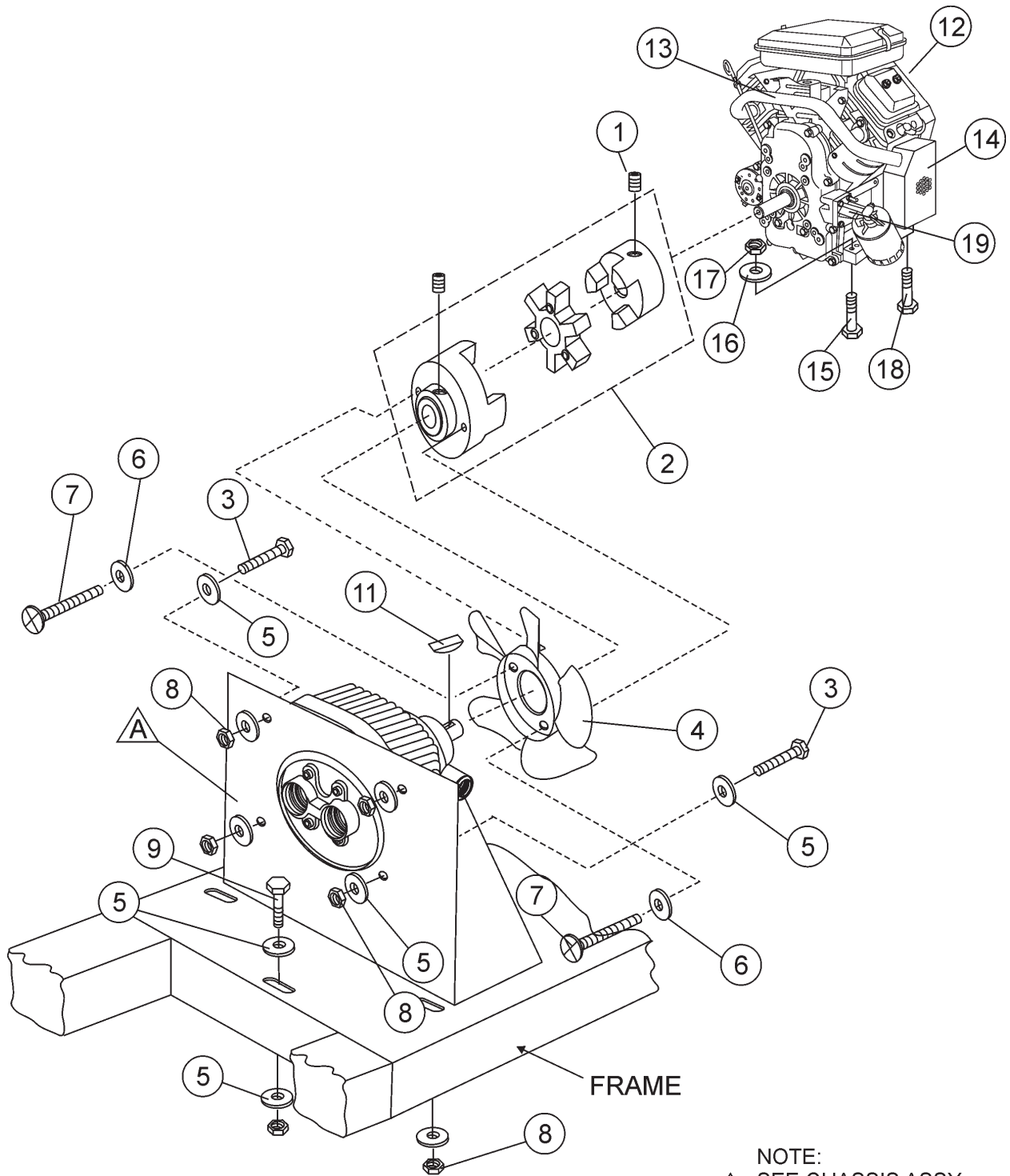
WBH-16EAWD POWER BUGGY — MANIFOLD ASSY

MANIFOLD ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|-------------------------|-------------|--------------------|
| 1 | 18045 | MANIFOLD BLOCK | 1 | |
| 2 | 3322 | ADAPTOR, ELBOW | 3 | |
| 3 | 3365 | ADAPTOR, ELBOW | 1 | |
| 4* | 509103 | ADAPTOR | 1 | |
| 5 | 3365 | ADAPTOR, ELBOW | 2 | |
| 6 | 513548 | ADAPTOR, ELBOW | 1 | |
| 7* | 18159 | ADAPTOR | 3 | |
| 8* | 18147 | ADAPTOR | 1 | |
| 9* | 18161 | ADAPTOR | 2 | |
| 10* | 25539 | ADAPTOR | 2 | |
| 11* | 18134 | BLOCK VALVE | 2 | |
| 12* | 18174 | SOLENOID | 1 | |
| 13* | 18034 | NUT, SOLENOID | 3 | |
| 14* | 18093 | SOLENOID, CONTROL | 2 | |
| 15* | 18095 | COIL, SOLENOID | 3 | |
| 16 | 18127 | MANIFOLD ASSEMBLY | 1 | INCLUDES ITEMS W/* |

WBH-16EAWD POWER BUGGY — PUMP AND COUPLING ASSY.

PUMP AND COUPLING ASSY.



NOTE:
SEE CHASSIS ASSY
PAGE 58, ITEM 8

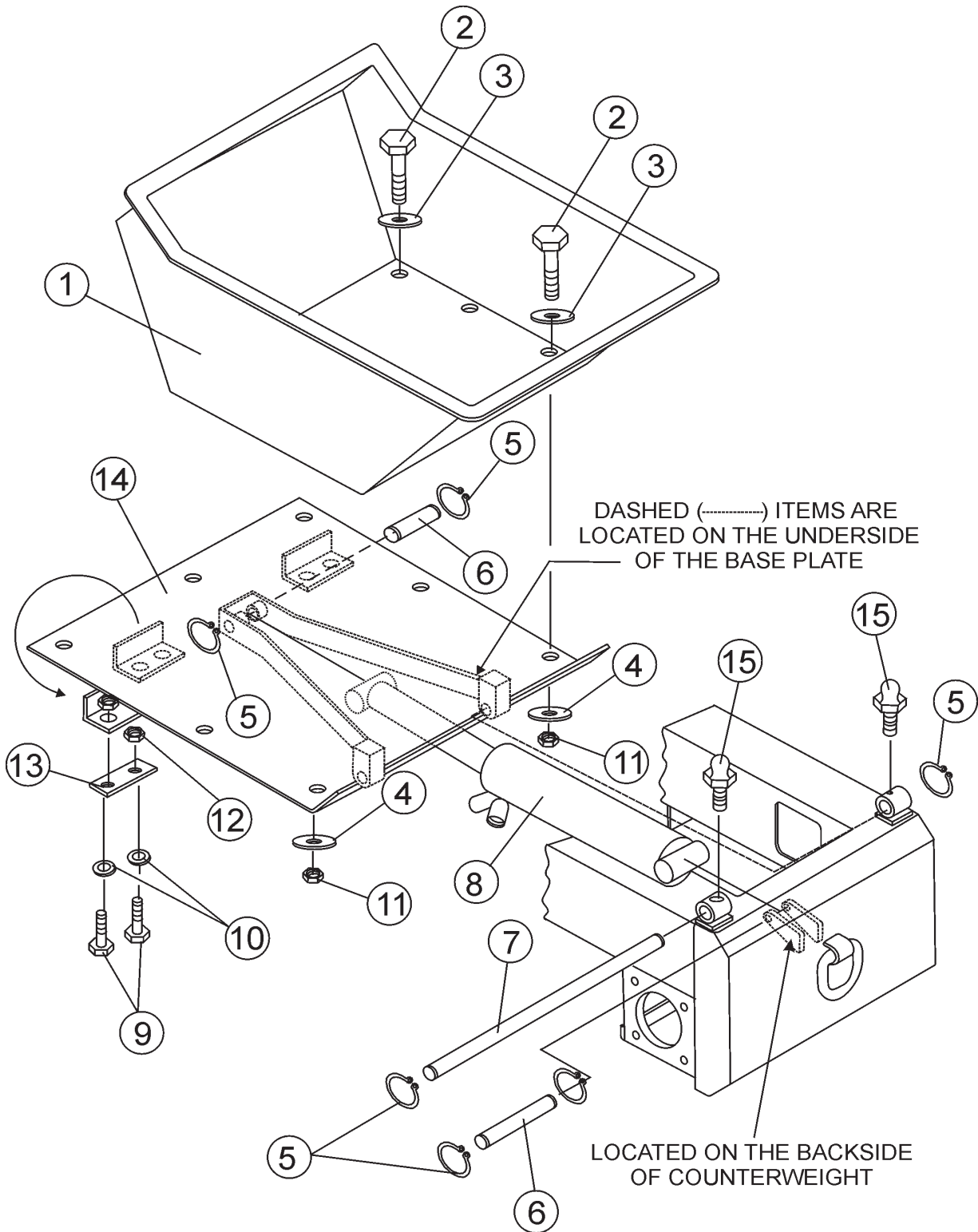
WBH-16EAWD POWER BUGGY — PUMP AND COUPLING ASSY.

PUMP AND COUPLING ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|--------------------------------|-------------|----------------|
| 1 | 492472 | SCREW, ALLEN HEAD 3/8-16 X 3/4 | 2 | |
| 2 | 511719 | COUPLING, ENGINE SHAFT | 1 | |
| 3 | 503112 | SCREW, HEX 3/8-16 X 2-3/4 | 4 | |
| 4 | 18112 | FAN | 1 | |
| 5 | 492598 | WASHER, FLAT 3/8 | 14 | |
| 6 | 492596 | WASHER, FLAT 1/4 | 2 | |
| 7 | 492355 | SCREW, HHC 1/4-20 X 1/2 | 2 | |
| 8 | 492583 | NUT, NYLOC 3/8-16 | 7 | |
| 9 | 492313 | SCREW, HHC 3/8-16 X 1-1/2 | 3 | |
| 10 | 512196 | BRACKET, HYD. PUMP MOUNTING | 1 | |
| 11 | 506250 | KEY, WOODRUFF | 1 | |
| 12 | 513518 | ENGINE, B&S 18HP VANGUARD | 1 | |
| 13 | 692061 | MANIFOLD, EXHAUST | 1 | |
| 14 | 807742 | MUFFLER, EXHAUST MANIFOLD | 1 | |
| 15 | 492368 | BOLT, 5/16 x 2 IN. | 2 | |
| 16 | 505679 | WASHER, FLAT 5/16 IN. | 2 | |
| 17 | 492582 | NUT, 5/16" | 4 | |
| 18 | 492367 | BOLT, 5/16 X 1-3/4 IN | 2 | |
| 19 | 808033 | SUPPORT, OIL SUPPORT | 1 | |

WBH-16EAWD POWER BUGGY — TUB ASSY.

TUB ASSY.



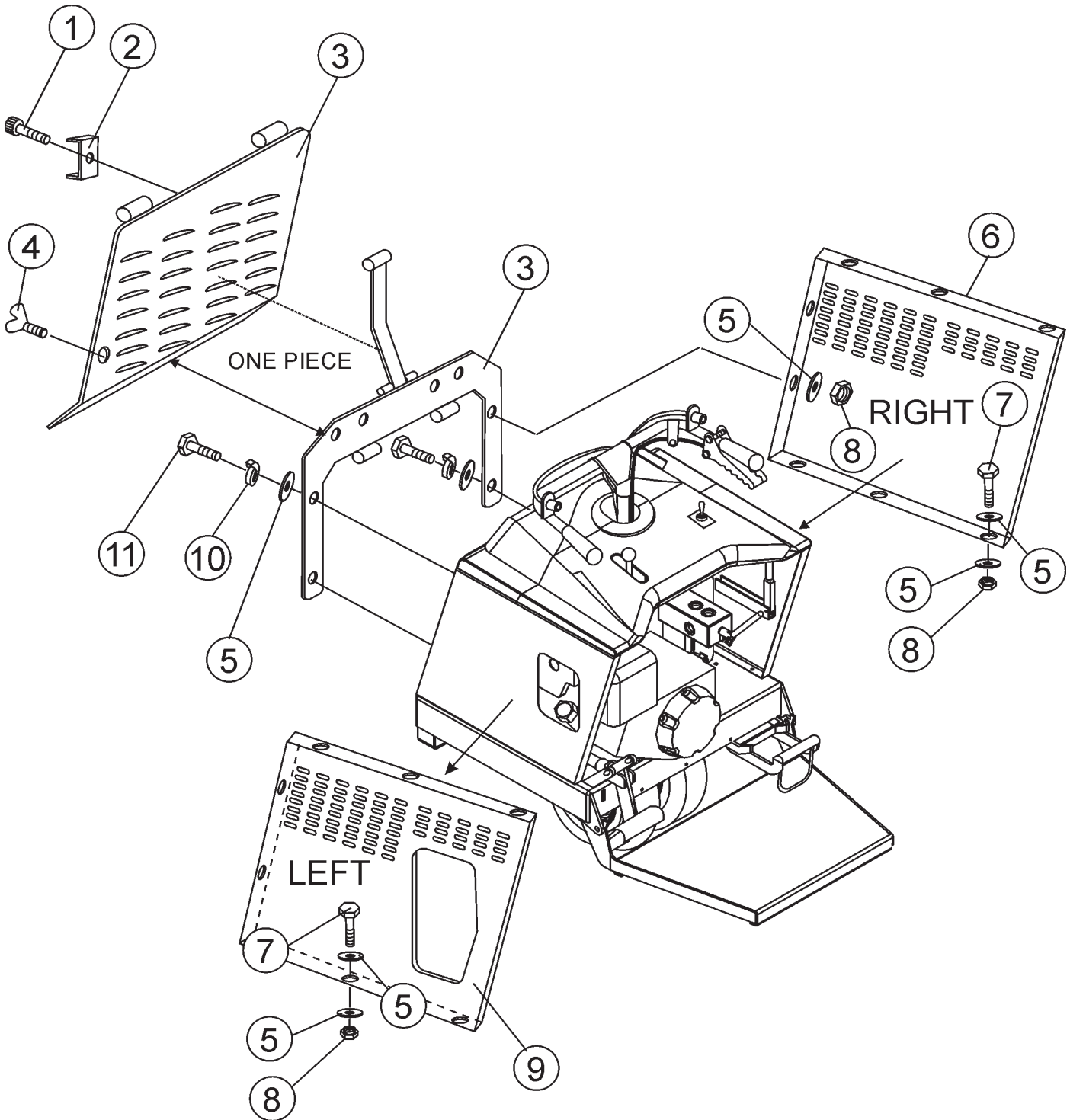
WBH-16EAWD POWER BUGGY — TUB ASSY.

TUB ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|----------------------------|-------------|----------------|
| 1 | 18004 | TUB, PLASTIC | 1 | |
| 2 | 492313 | SCREW, HHC 3/8-16 X 1-1/2 | 9 | |
| 3 | 512193 | WASHER, FLAT 3/8 LARGE | 9 | |
| 4 | 492598 | WASHER, FLAT 3/8 | 9 | |
| 5 | 490957 | RING, SNAP | 6 | |
| 6 | 18130 | PIN, HYD. PISTON CROSS | 2 | |
| 7 | 18129 | PIN, TUB FRAME CROSS | 1 | |
| 8 | 18022 | CYLINDER, HYDRAULIC DUMP | 2 | |
| 9 | 492365 | SCREW, HHC 5/16-18 X 1-1/4 | 4 | |
| 10 | 492597 | WASHER, FLAT 9.5 X 22.2 | 8 | |
| 11 | 492583 | NUT, NYLOC 3/4-16 | 9 | |
| 12 | 492582 | NUT, NYLOC 5/16-18 | 4 | |
| 13 | 512279 | SUPPORT, BUM STOP | 2 | |
| 14 | 18099 | FRAME, TUB MOUNT | 1 | |

WBH-16EAWD POWER BUGGY — PANEL ASSY.

PANEL ASSY.



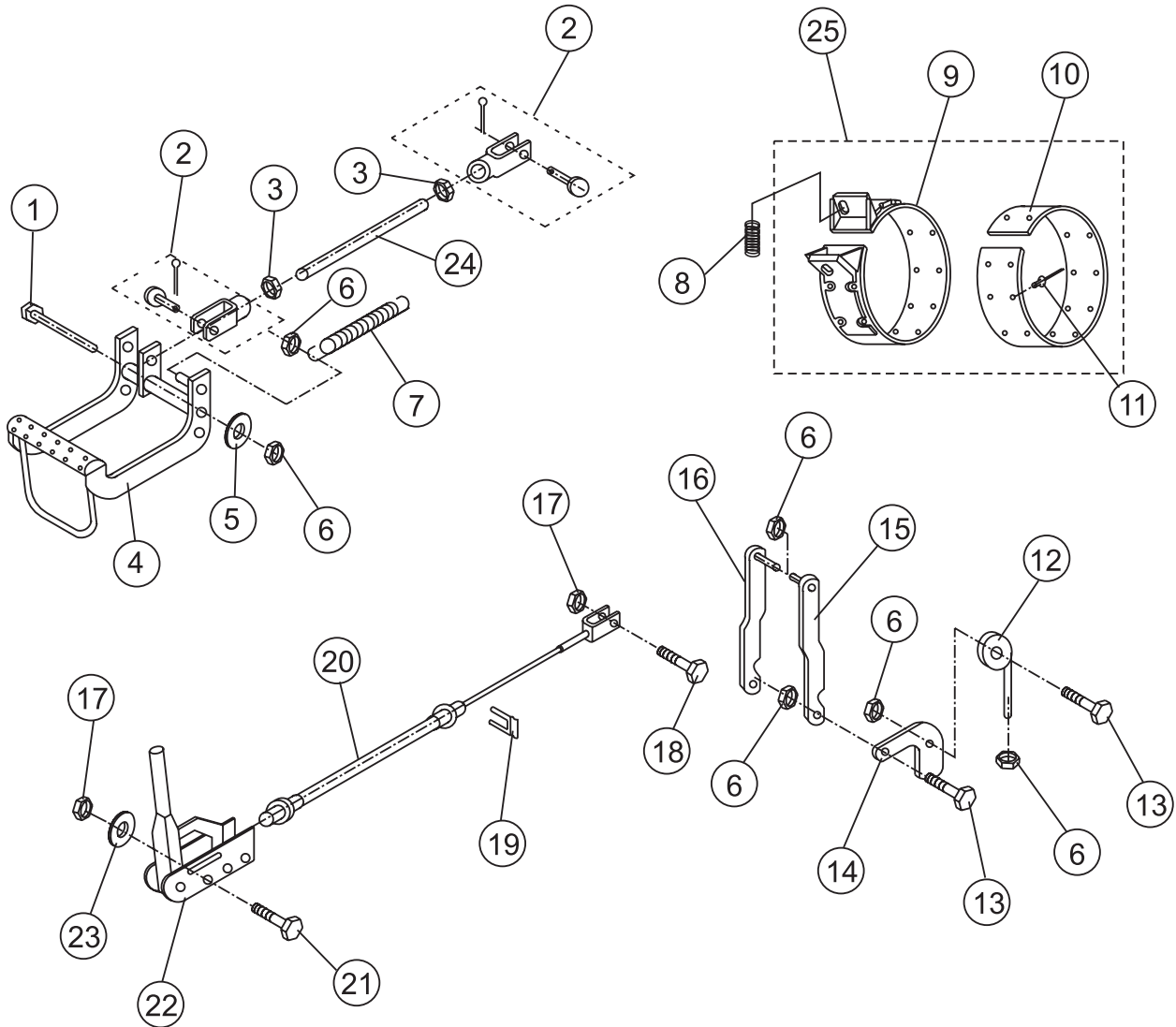
WBH-16EAWD POWER BUGGY — PANEL ASSY.

PANEL ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|-----------|----------------|-------------------------|-------------|----------------|
| 1 | 511476 | SCREW, ALLEN 1/8 X 1/4 | 1 | |
| 2 | 511474 | FASTENER, ACCESS DOOR | 1 | |
| 3 | 18008 | DOOR, ACCESS | 1 | |
| 4 | 18024 | SCREW, WING 1/4-20X3/4 | 2 | |
| 5 | 492597 | WASHER, FLAT 9.5X22.2 | 20 | |
| 6 | 18141 | COVER, R/SIDE ENGINE | 1 | |
| 7 | 492364 | SCREW, HHC 5/16-18X1 | 6 | |
| 8 | 492582 | NUT, NYLOC 5/16-18 | 4 | |
| 9 | 18140 | COVER, L/SIDE ENGINE | 1 | |
| 10 | 492623 | WASHER, LOCK 5/16 | 4 | |
| 11 | 505401 | SCREW, HHC 5/16-18X 1/2 | 4 | |

WBH-16EAWD POWER BUGGY — BRAKE ASSY.

BRAKE ASSY.



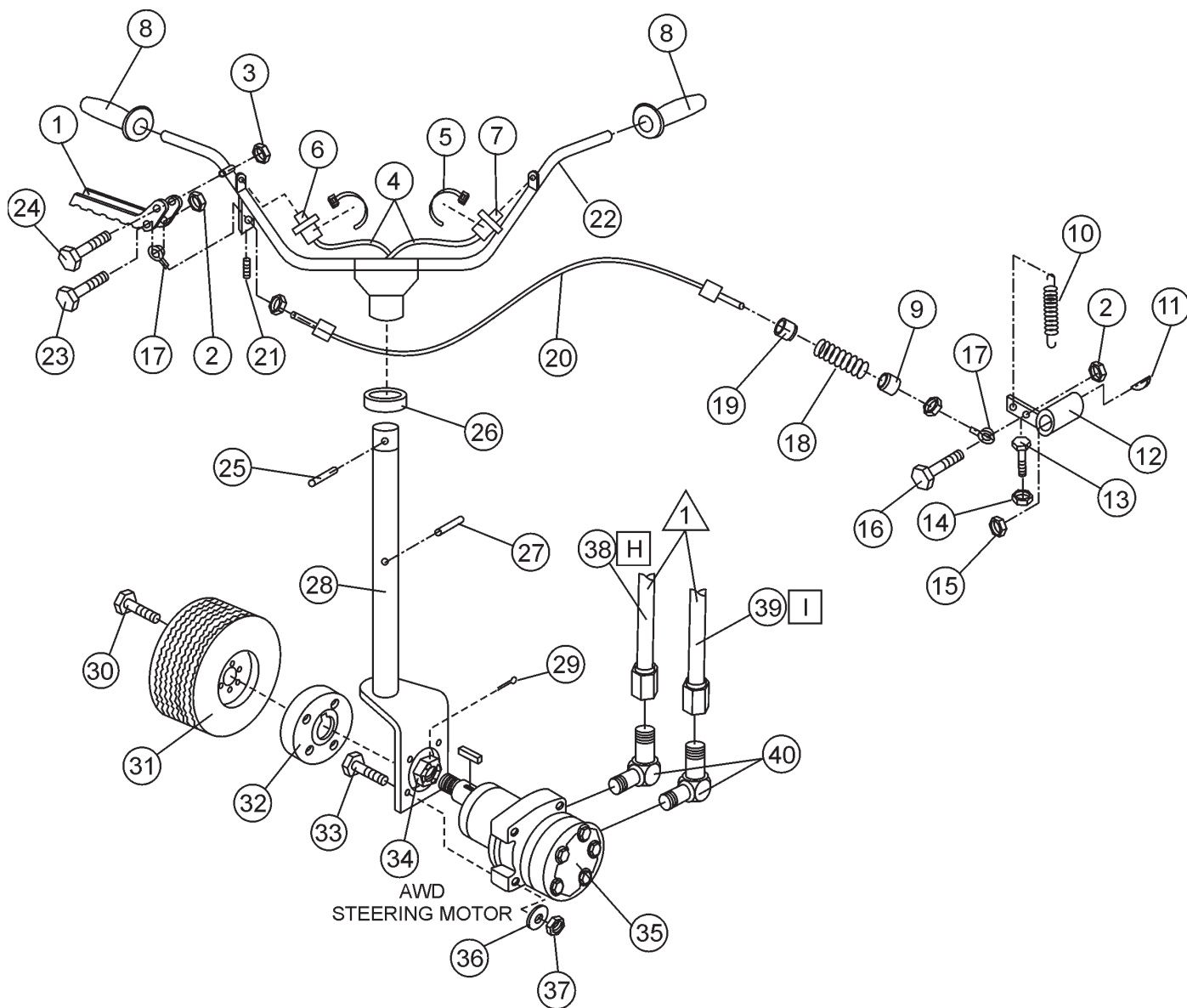
WBH-16EAWD POWER BUGGY — BRAKE ASSY.

BRAKE ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|-----------|----------------|---------------------------|-------------|---------------------|
| 1 | 511762 | SCREW, HHC 1/2-13X8 | 1 | |
| 2 | 511698 | CLEVIS, ASSY. BRAKE | 2 | |
| 3 | 511761 | NUT, HEX 3/8-24 NF | 2 | |
| 4 | 18111 | PEDAL, BRAKE | 1 | |
| 5 | 492600 | WASHER, FLAT 1/2 | 1 | |
| 6 | 492584 | NUT, NYLOC 1/2-13 | 10 | |
| 7 | 18167 | SPRING, BRAKE PEDAL | 1 | |
| 8 | 18307 | SPRING, BRAKE | 2 | |
| 9* | | BAND, BRAKE | 2 | NOT SOLD SEPARATELY |
| 10* | | LINING, BRAKE | 2 | NOT SOLD SEPARATELY |
| 11* | | RIVET, BRAKE LINING | 56 | NOT SOLD SEPARATELY |
| 12 | 18303 | SHAFT, CRANK PIN | 2 | |
| 13 | 492395 | SCREW, HHC 1/2-13X1-3/4 | 2 | |
| 14 | 18302 | BELL CRANK, BRAKE | 2 | |
| 15 | 18032 | LINKAGE, RIGHT BRAKE | 1 | |
| 16 | 18314 | LINKAGE, LEFT BRAKE | 1 | |
| 17 | 2105164 | NUT, NYLOC 5/16-18 | 2 | |
| 18 | 492303 | SCREW, HHC 5/16-18X1-14 | 1 | |
| 19 | 505170 | CLIP, PARK CABLE | 1 | |
| 20 | 18016 | CABLE, PARK BRAKE | 1 | |
| 21 | 492367 | SCREW, HHC 5/16-18X1-3/4 | 3 | |
| 22 | 18015 | LEVER, ASSY. PARK BRAKE | 1 | |
| 23 | 492597 | WASHER, FLAT 9.5X22.2 | 3 | |
| 24 | 18145 | ROD, BRAKE CONTROL | 1 | |
| 25 | 512881 | BRAKE BAND ASSEMBLY | 1 | INCLUDES ITEMS W/* |

WBH-16EAWD POWER BUGGY — STEERING ASSY.

STEERING ASSY.



NOTE:

- H SEE HYDRAULIC HOSE CONNECTIONS PAGE 33
- I CHASSIS ASSY. CONNECT TO ITEM 34, PAGE 56
- 1

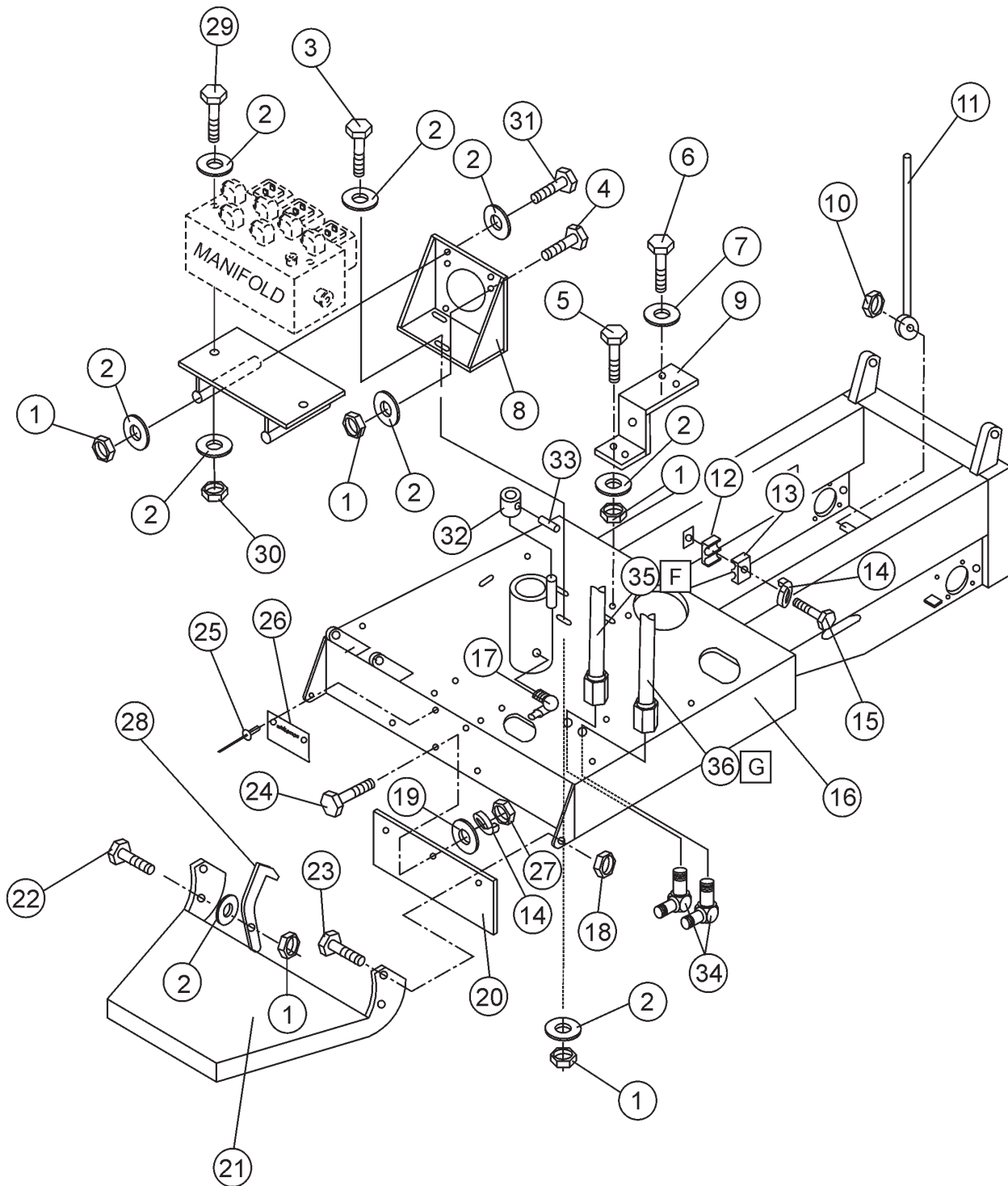
WBH-16EAWD POWER BUGGY — STEERING ASSY.

STEERING ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|-----------|----------------|-------------------------------|-------------|----------------|
| 1 | 18132 | LEVER, THROTTLE | 1 | |
| 2 | 492581 | NUT, NYLOC 1/4-20 | 1 | |
| 3 | 492582 | NUT, NYLOC 5/16-18 | 1 | |
| 4 | 505304 | COVER, WIRE | 1 | |
| 5 | 504505 | WRAP, TIE | 1 | |
| 6 | 18043 | SWITCH, KILL | 1 | |
| 7 | 18044 | SWITCH, TRACTION ASSIST | 1 | |
| 8 | 511432 | GRIP, HANDLE | 2 | |
| 9 | 18181 | BUSHING, CABLE | 1 | |
| 10 | 18177 | SPRING | 1 | |
| 11 | 511717 | KEY, WOODRUFF 1/8X5/8 | 1 | |
| 12 | 18061 | LEVER, CONTROL | 1 | |
| 13 | 512414 | SCREW, HHC 1/4-20 X 2-1/4 | 1 | |
| 14 | 492561 | NUT, HEX 1/4-20 | 1 | |
| 15 | 492584 | NUT, NYLOC 1/2-13 | 1 | |
| 16 | 492357 | SCREW, HHC 1/4-20X1 | 1 | |
| 17 | 18183 | CONNECTOR, THROTTLE CABLE END | 2 | |
| 18 | 18176 | SPRING | 1 | |
| 19 | 18182 | BUSHING, CABLE | 1 | |
| 20 | 18133 | CABLE, THROTTLE | 1 | |
| 21 | 492465 | SCREW, ALLEN HEAD 1/4-20 X3/8 | 1 | |
| 22 | 18282 | HANDLE BAR | 1 | |
| 23 | 506088 | SCREW, HHC 1/4-20X3/8 | 1 | |
| 24 | 492369 | SCREW, HHC 5/16-18X2-1/4 | 1 | |
| 25 | 491723 | PIN, STEERING SHAFT | 1 | |
| 26 | 18238 | BEARING, STEERING SHAFT | 1 | |
| 27 | 512186 | PIN, STEERING SHAFT | 1 | |
| 28 | 18091 | AXLE, STEERING | 1 | |
| 29 | 491689 | KEY, COTTER 1/8 X 2 | 1 | |
| 30 | 18083 | CONE BOLT 1/2 X 1-1/2" | 4 | |
| 31 | 18082 | WHEEL, REAR STEERING | 1 | |
| 32 | 18207 | HUB, DRIVE | 1 | |
| 33 | 492399 | BOLT 1/2 x 3 IN | 4 | |
| 34 | PT018038 | NUT, CASTLE 1-1/8 IN. | 1 | |
| 35 | 18011 | MOTOR, HYDRAULIC DRIVE | 1 | |
| 36 | 492600 | WASHER, FLAT 1/2 IN. | 4 | |
| 37 | 492584 | NUT, NYLOCK 1/2 IN. | 4 | |
| 38 | 513611 | HOSE, CHASSIS | 1 | |
| 39 | 513610 | HOSE, CHASSIS | 1 | |
| 40 | 16524 | ADAPTOR, ELBOW | 2 | |

WBH-16EAWD POWER BUGGY — CHASSIS ASSY.

CHASSIS ASSY.



NOTE:

- F** SEE HYDRAULIC HOSE CONNECTIONS
- G** PAGE 34

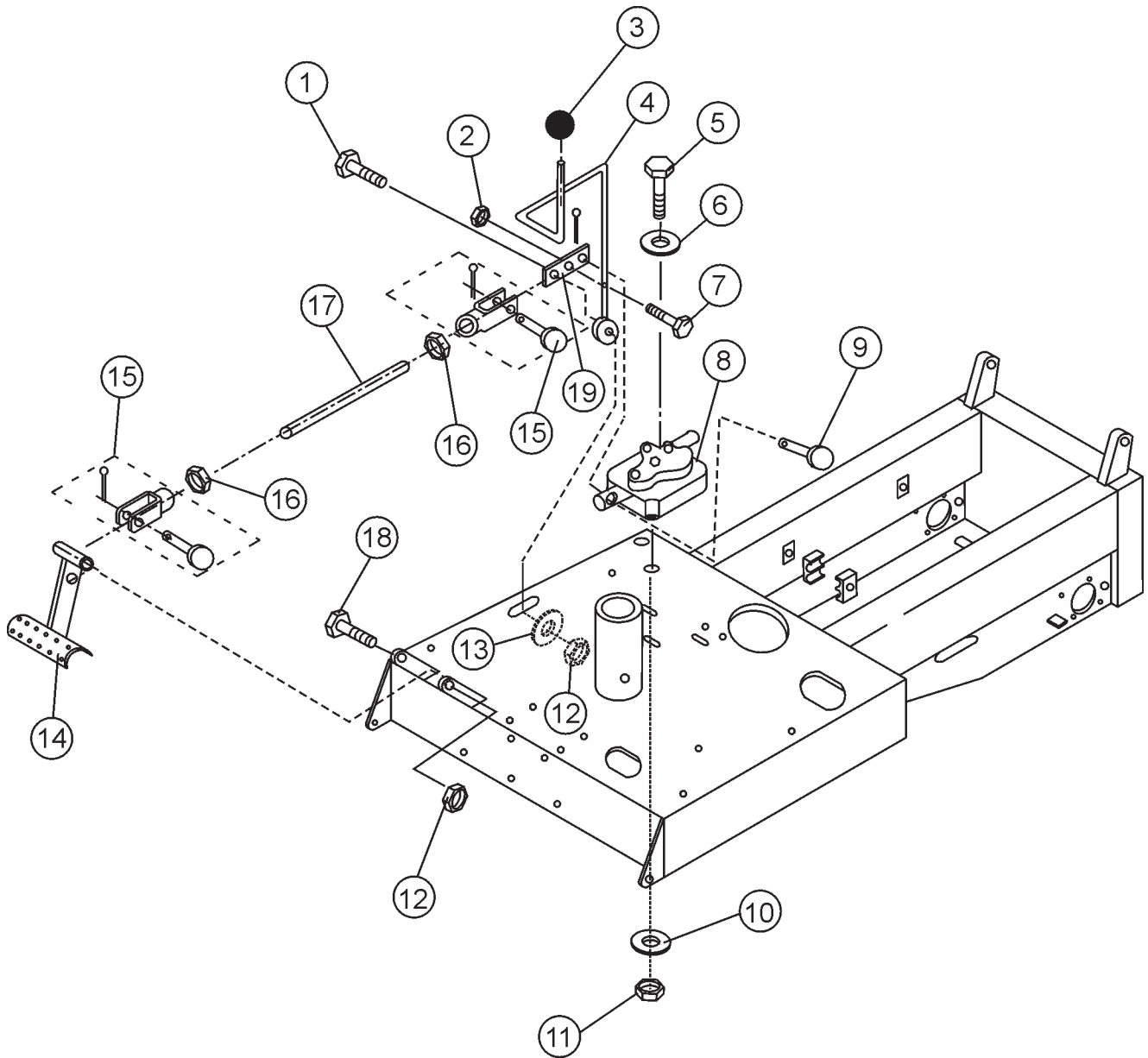
WBH-16EAWD POWER BUGGY — CHASSIS ASSY.

CHASSIS ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|-------------------------------|-------------|----------------|
| 1 | 492583 | NUT, NYLOC 3/8 | 10 | |
| 2 | 492598 | WASHER, FLAT 3/8 | 18 | |
| 3 | 492313 | SCREW, HHC 3/8- 16 X 1- 1/2 | 3 | |
| 4 | 503112 | SCREW, HHC 3/8- 16 X 2- 3/4 | 4 | |
| 5 | 492375 | SCREW, HHC 3/8- 16 X 12 | 2 | |
| 6 | 492357 | SCREW, HHC 1/4- 20 X 12 | 2 | |
| 7 | 492622 | WASHER, LOCK 1/4 | 2 | |
| 8 | 512196 | BRACKET, HYD. PUMP MOUNTING | 1 | |
| 9 | 18146 | MOUNT, OIL FILTER | 1 | |
| 10 | 505069 | NUT, NYLOC 3/4- 10 | 1 | |
| 11 | 18198 | ROD, TUB PROP | 1 | |
| 12 | 505976 | CLAMP, BRACKET | 2 | |
| 13 | 506185 | CLAMP, BRACKET | 2 | |
| 14 | 492623 | WASHER, LOCK 5/16 | 5 | |
| 15 | 492366 | SCREW, HHC 5/16- 18 X 1- 1/2 | 2 | |
| 16 | 18047 | CHASSIS | 1 | |
| 17 | 503901 | ZERK FITTING 1/4- 28 | 1 | |
| 18 | 492586 | NUT, NYLOC 5/8-11 | 2 | |
| 19 | 492597 | WASHER, FLAT 9.5 X 22.2 | 3 | |
| 20 | 18162 | PANEL, REAR WHEEL COVER | 1 | |
| 21 | 18222 | PLATFORM, OPERATOR | 1 | |
| 22 | 492313 | SCREW, HHC 3/8- 16 X 1- 1/2 | 1 | |
| 23 | 492406 | SCREW, HHC 5/8- 11 X 1- 1/2 | 2 | |
| 24 | 492363 | SCREW, HHC 5/16- 18 X 3/4 | 3 | |
| 25 | 491757 | RIVET, I.D. PLATE | 2 | |
| 26 | 508936 | PLATE, SERIES I.D. | 1 | |
| 27 | 492553 | NUT, HEX 5/16- 18 | 3 | |
| 28 | 18173 | LATCH, PLATFORM | 1 | |
| 29 | 51359 | SCREW, HHC 3.8-16X5 | 2 | |
| 30 | 492583 | NUT, NYLOCK 3/8" | 2 | |
| 31 | 492384 | SCREW, HHC 3/8-16 X 4 | 2 | |
| 32 | 513595 | STEERING AUGMENT | 1 | |
| 33 | 492465 | SCREW, ALLEN HD 1/4-20 x 3/8" | 1 | |
| 34 | 511810 | ADAPTOR, ELBOW | 2 | |
| 35 | 513600 | HOSE, MANIFOLD | 1 | |
| 36 | 513604 | HOSE, MANIFOLD | 1 | |

WBH-16EAWD POWER BUGGY — DUMP PEDAL AND HANDLE ASSY.

DUMP PEDAL AND HANDLE ASSY.



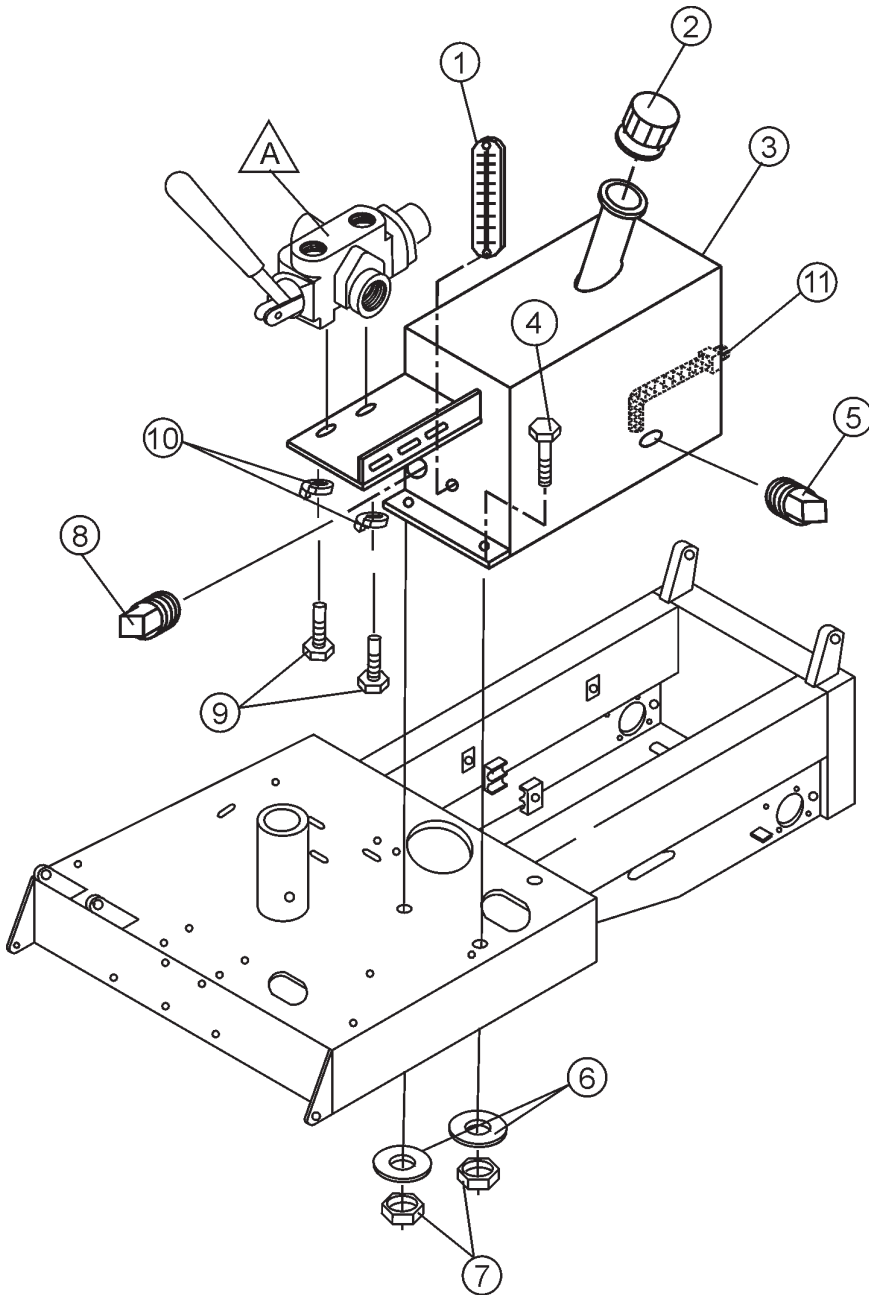
WBH-16EAWD POWER BUGGY — DUMP PEDAL AND HANDLE ASSY.

DUMP PEDAL AND HANDLE ASSY.


| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|-----------------------------|-------------|--------------------------------|
| 1 | 492401 | SCREW, HHC 1/2- 13 X 4 | 1 | |
| 2 | 512184 | NUT, NYLOC 3/16- 24 | 1 | |
| 3 | 18121 | KNOB, LEVER | 1 | |
| 4 | 18065 | LEVER, DUMP VALVE | 1 | |
| 5 | 512185 | SCREW, HHC 1/4- 20 X1- 3/4 | 2 | |
| 6 | 492622 | WASHER, LOCK 1/4 | 1 | |
| 7 | 512183 | SCREW, HHC 3/16- 24 X1- 1/4 | 1 | |
| 8 | 18064 | VALVE, DUMP | 1 | INCLUDES ITEMS W/* |
| 9* | | PIN, DUMP VALVE CROSS | 1 | CANNOT BE PURCHASED SEPERATELY |
| 10 | 492596 | WASHER, FLAT 1/4 | 1 | |
| 11 | 492581 | NUT, NYLOC 1/4- 20 | 1 | |
| 12 | 492584 | NUT, NYLOC 1/2- 13 | 2 | |
| 13 | 492600 | WASHER, FLAT 1/2 | 1 | |
| 14 | 18152 | PEDAL, DUMP VALVE | 1 | |
| 15 | 18123 | CLEVIS , ASSY. DUMP VALVE | 2 | |
| 16 | 511761 | NUT, HEX 3/8- 24 NF | 2 | |
| 17 | 18153 | ROD, DUMP VALVE | 1 | |
| 18 | 492400 | SCREW, HHC 1/2- 13 X 3- 1/2 | 1 | |
| 19 | 18122 | BELL CRANK, DUMP VALVE | 1 | |

WBH-16EAWD POWER BUGGY — HYDRAULIC OIL TANK ASSY.

HYDRAULIC OIL TANK ASSY.



NOTE

 HYDRAULIC PUMP ASSY.
SEE ITEM 14, PAGE 42

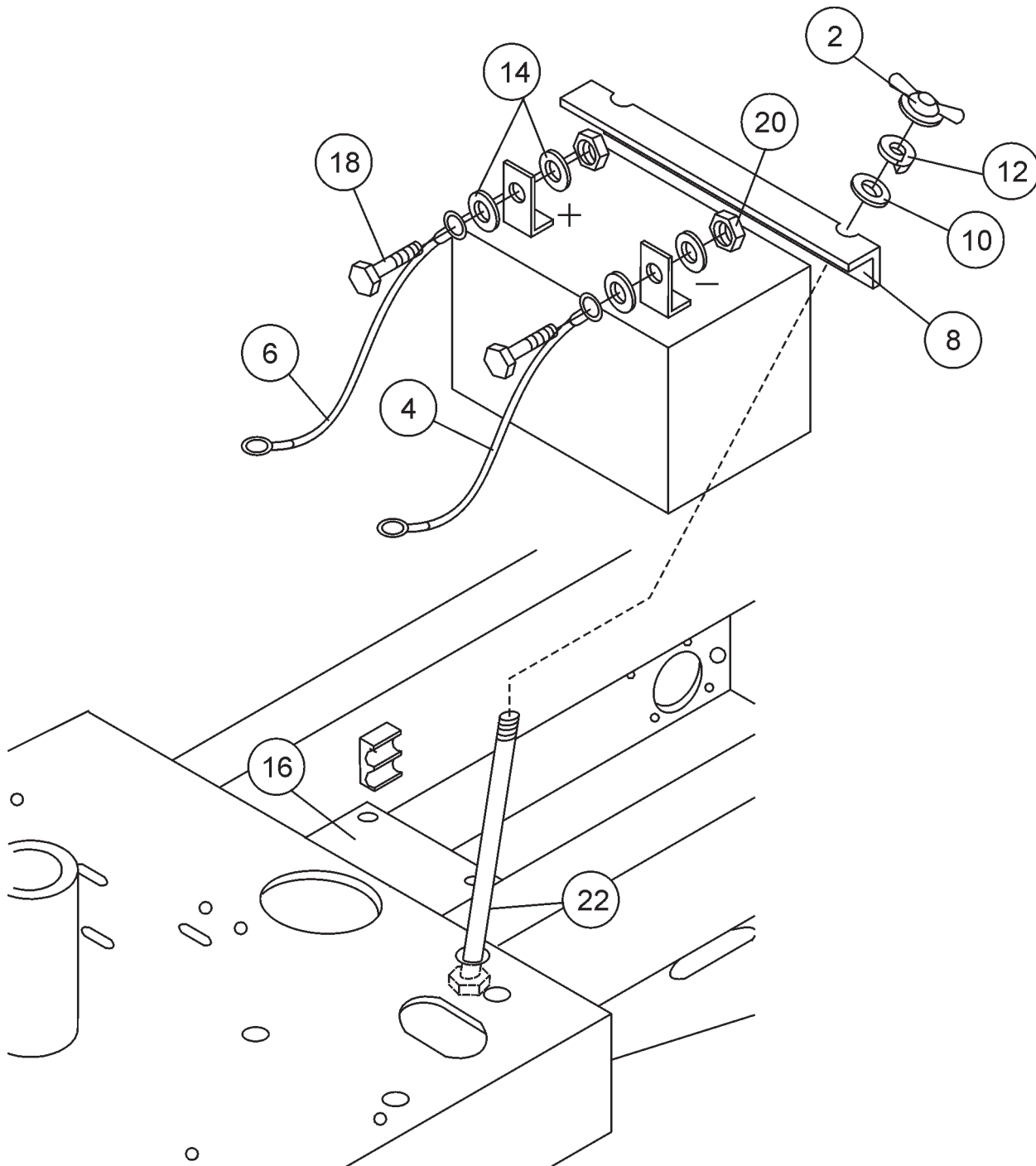
WBH-16EAWD POWER BUGGY — HYDRAULIC OIL TANK ASSY.

HYDRAULIC OIL TANK ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|----------------------------|-------------|----------------|
| 1 | 3336 | SIGHT GAUGE, HYD. OIL TANK | 1 | |
| 2 | 16477 | CAP, HYD. OIL TANK | 1 | |
| 3 | 18113 | TANK HYD. OIL | 1 | |
| 4 | 492375 | SCREW, HHC 3/8- 16 X1 | 3 | |
| 5 | 491212 | PLUG, HYD. OIL TANK 1/2" | 1 | |
| 6 | 492598 | WASHER, FLAT 3/8 | 3 | |
| 7 | 492583 | NUT, NYLOC 3/8- 16 | 3 | |
| 8 | 49123 | PLUG, HYD. OIL TANK 3/4 | 1 | |
| 9 | 492373 | SCREW, HHC 3/8- 16 X 3/4 | 2 | |
| 10 | 492624 | WASHER, LOCK 3/8 | 2 | |
| 11 | 18229 | SCREEN, OIL RESERVOIR | 2 | |

WBH-16EAWD POWER BUGGY — BATTERY (OPTIONAL ELECTRIC START)

HYDRAULIC OIL TANK ASSY.



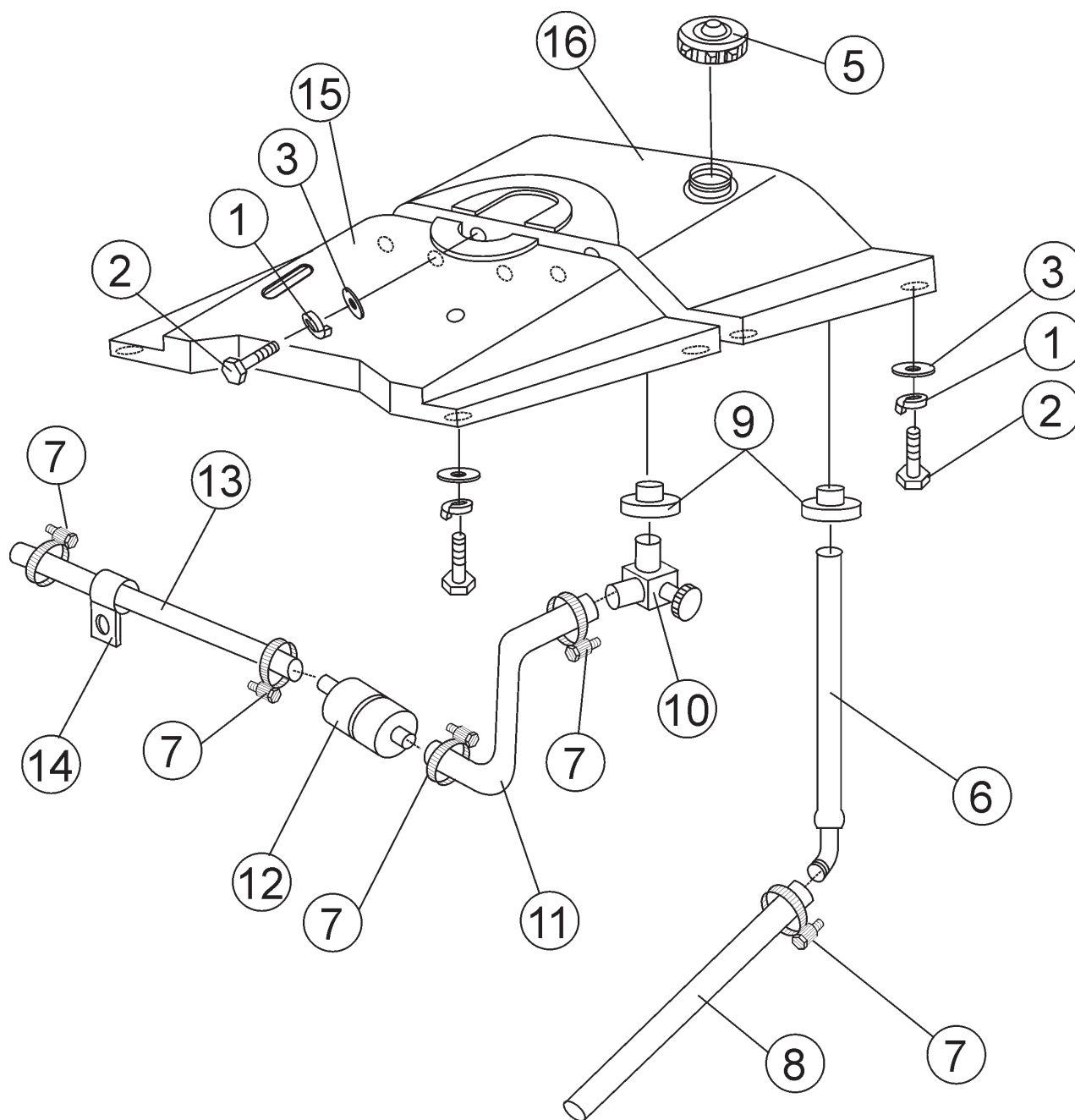
WBH-16EAWD POWER BUGGY — BATTERY (OPTIONAL ELECTRIC START)

BATTERY (OPTIONAL ELECTRIC START)

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|--------------------------|-------------|-----------------------|
| 2 | 505500 | WINGNUT | 2 | |
| 4 | 512557 | BATTERY CABLE, NEGATIVE | 1 | |
| 6 | 511250 | BATTERY CABLE, POSITIVE | 1 | |
| 8 | 512555 | BATTERY SUPPORT BRACKET | 1 | |
| 10 | 492596 | WASHER, FLAT 1/4" | 2 | |
| 12 | 2101402 | WASHER, LOCK 1/4" | 2 | REPLACES 492622 |
| 14 | 492595 | WASHER, FLAT 3/16" | 4 | |
| 16 | 508480 | BATTERY SUPPORT PLATFORM | 1 | |
| 18 | 503118 | BOLT 3/16" x 1" | 2 | |
| 20 | 503119 | NUT 3/16" | 2 | |
| 22 | 512585 | SUPPORT BRACKET BOLT | 2 | |
| 24 | 4671 | BATTERY | 1 | |

WBH-16EAWD POWER BUGGY — FUEL TANK ASSY.

FUEL TANK ASSY.



WBH-16EAWD POWER BUGGY — FUEL TANK ASSY.

FUEL TANK ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|--------------------------|-------------|----------------|
| 1 | EM923343 | WASHER, LOCK 5/16 | 4 | |
| 2 | EM492299 | SCREW, HHC 5/16-18 X 1/2 | 4 | |
| 3 | EM923023 | WASHER, FLAT 5/16 | 4 | |
| 4 | 18280 | COLLAR, STEERING SHAFT | 1 | |
| 5 | 18166 | CAP, FUEL | 1 | |
| 6 | 18042 | TUBE, FUEL TANK BREATHER | 1 | |
| 7 | 506208 | CLAMP, FUEL HOSE | 5 | |
| 8 | 512269 | HOSE, BREATHER | 1 | |
| 9 | 20795 | SEAL, FUEL TANK GROMMET | 2 | |
| 10 | 19661 | VALVE, FUEL SHUT-OFF | 1 | |
| 11 | 512192 | HOSE, FUEL | 1 | |
| 12 | EM20763 | FILTER, FUEL | 2 | |
| 13 | 512191 | HOSE, FUEL | 1 | |
| 14 | 511807 | STRAP NYLON 5/8 | 1 | |
| 15 | 18103 | COVER, FUEL TANK | 1 | |
| 16 | 18098 | TANK, FUEL | 1 | |

PAYMENT TERMS

Terms of payment for parts are net 30 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 hereunder 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

UNITED STATES

Multiquip Corporate Office

18910 Wilmington Ave. Tel. (800) 421-1244
Carson, CA 90746 Fax (800) 537-3927
Contact: mq@multiquip.com

Mayco Parts

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

Service Department

800-421-1244 Fax: 310-537-4259
310-537-3700

MQ Parts Department

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

Warranty Department

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

Technical Assistance

800-478-1244 Fax: 310-631-5032

MEXICO

MQ Cipsa

Carr. Fed. Mexico-Puebla KM 126.5 Tel: (52) 222-225-9900
Momoxpan, Cholula, Puebla 72760 Mexico Fax: (52) 222-285-0420
Contact: pmastretta@cipsa.com.mx

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Contact: jmartin@multiquip.com

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Lancashire OL7 0TL
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Contact: cnavarro@multiquip.com.br, srentes@multiquip.com.br

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