

# **Operator's Manual**

# POST HOLE DIGGER ACCESSORIES

#### DOWN FORCE KIT

PHD-002 (fits models MOLE 300 & 400) PHD-005 (fits model MOLE 200)

#### **HOOKUP STAND**

009-9851 (fits models MOLE 100, 200, 300 & 400)

## **POSITIONING HANDLE**

PHD-003 (fits models MOLE 200, 300 & 400)

Before you begin use of equipment, read, understand, and follow all safety instructions in this manual and in the post hole digger manual.

#### **SAFETY**

Take note! This safety alert symbol found throughout this manual is used to call your attention to instructions involving your personal safety and the safety of others. Failure to follow these instructions can result in injury or death.



This symbol means:
ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!

#### **Signal Words**

Note the use of the signal words DANGER, WARNING and CAUTION with the safety messages. The appropriate signal words for each have been selected using the following guidelines:



**DANGER:** Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.



**WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.



**CAUTION:** Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

### **INDEX**

1 - GENERAL INFORMATION	4
1.01 - General	4
1.02 - Down Force Kit Assembly and Operation	4
1.03 - Hookup Stand Assembly and Operation	6
1.04 - Positioning Handle Assembly and Operation	7
2 - SAFETY PRECAUTIONS	9
2.01 - Preparation	9
2.02 - Starting and Stopping	12
2.03 - Messages and Signs	13
PARTS MANUAL	15

#### 1 - GENERAL INFORMATION

Thank you and congratulations for having chosen our accessory. It is technologically advanced and constructed of high quality, sturdy components that will fulfill your working expectations. Read this manual carefully. It will instruct you on how to operate and service your implement safely and correctly. Failure to do so could result in personal injury and/or in equipment damage.

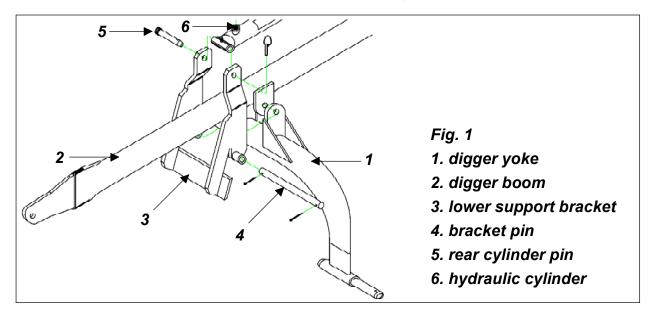
#### **1.01 - General**

Available as an option for the Befco line of post hole diggers are: A hydraulic down force kit (for models Mole 200, 300 & 400) that allows for additional digging force in hard soil conditions; a hookup stand for easy and safe storage (for all models) and a positioning handle that mounts on the gearbox of the digger to enable operator to easily position the auger point on the ground from tractor seat (for models Mole 200, 300 & 400).



CAUTION: Unless otherwise specified, all hardware is metric. Use only metric tools on metric hardware. Other tools that do not fit properly can slip and cause injury.

#### 1.02 - Down Force Kit Assembly and Operation



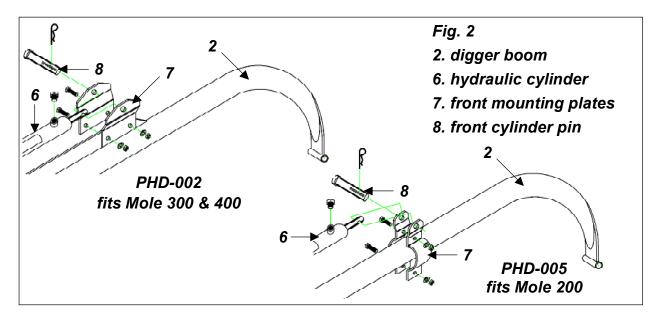
The hydraulic down force kit allows for additional digging force in hard soil conditions. The kit consists of a cylinder that attaches to the post hole digger by the use of

mounting plates. It operates using the tractor hydraulic system and it provides between 300 and 500 lb. of additional down pressure depending on mounting configuration. The hydraulic down force kit comes in two versions, one (PHD-005) that fits the Mole 200 and one (PHD-002) for the Mole 300 & 400.



WARNING: High pressure hydraulic oil leaks can penetrate skin resulting in injury, gangrene or death. Be sure to relieve any hydraulic oil pressure before disconnecting any lines or pipes between post hole digger and tractor hydraulic system. Check for oil leaks using a cardboard, never use hands.

IMPORTANT: Serious damage can occur to post hole digger and down force kit if tractor hydraulics does not have float capabilities.



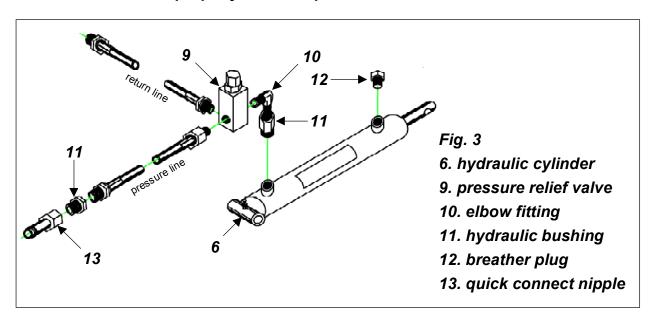
To assemble the down force kit proceed as follows:

- 1. Lower post hole digger until auger point is resting on the ground.
- 2. Remove pin that connects the yoke to digger boom.
- 3. Assemble lower support bracket to digger boom and yoke by using the new pin (see #4, fig. 1) that is pre-installed on the bracket. Insert both cotter pins after mounting pin.
- 4. Assemble front mounting plates to digger boom (see fig. 2) using two bolts ½"x 1¾", two lock washers ½" and two hex nuts ½" provided.
- 5. Mount the hydraulic cylinder (see #6, fig. 1) on top of lower support bracket using the rear cylinder pin ¾"x3<sup>7</sup>/<sub>8</sub>" (see #5, fig. 1) and lynch pin. Mount non-action end of the cylinder on the lower support bracket.
- 6. Mount the other end of the hydraulic cylinder on front mounting plates (see #7, fig. 2) using front cylinder pin <sup>3</sup>/<sub>4</sub>"x3" (see #8, fig. 2) and "R" clip provided.

7. Hydraulic hoses come pre-assembled to the pressure relief valve, connect assembly to the cylinder (see fig. 3). (If additional work needs to be done to hydraulic pluming to fit your tractor's needs, use teflon tape to seal pipe threads.)

8. Connect pressure line (see fig. 3) to tractor hydraulic outlet and return line to reservoir.

IMPORTANT: Do not connect return line to tractor remote outlet. Damage will occur to frame if not properly hooked up to reservoir.





CAUTION: Hydraulic pressure relief valve is preset at 1500 psi and should not be changed. Increasing the pressure can result in damage to the equipment.

#### **1.03 - Hookup Stand Assembly and Operation**

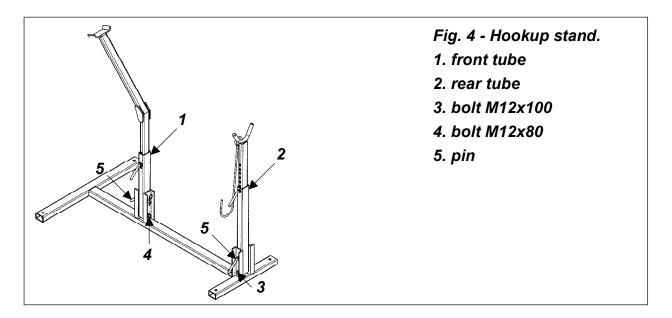
The hookup stand can be used with all Mole models. It is ideal for storing the post hole digger safely and will prolong implement's life by keeping it off the ground. The foldable hookup stand will also allow for easy mounting and dismounting of the post hole digger to the tractor. The hookup stand has several adjusting height options to accommodate your needs.

To assemble the hookup stand proceed as follows (see fig. 4):

- 1. Place stand base on a level surface.
- 2. Insert front (gearbox side) and rear (boom side) tubes into mounting bracket on stand base and secure bottom hole of both tubes with the bolt (use M12x100 on rear tube and M12x80 on front tube), two flat washers (one per each side of mounting bracket) and tighten with locknut.

3. Insert a pin in the top hole of both mounting brackets making sure longer pin is used on the 'Y' shaped bracket and secure with cotter pins.

4. Once the stand is located in a permanent position, secure it by placing stakes or screws in all corners.





DANGER: Stop engine, lock parking brake and remove key before dismounting tractor.

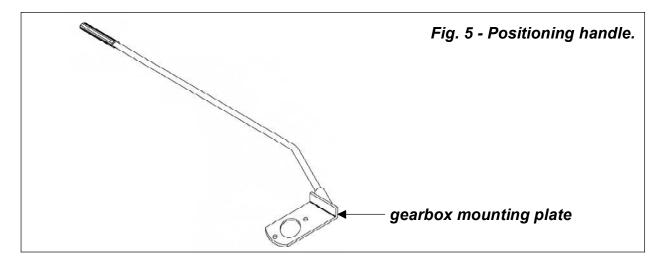
The stand is foldable in order to help position the post hole digger. Removing the bottom pins on each mounting bracket will enable tubes to fold down. Once post hole digger is properly aligned on stand base, shut tractor off and lock parking brakes before dismounting tractor, raise front and rear tubes back into a vertical position and re-secure with pins and cotter pins previously removed, and carefully lower implement on stand. Disconnect 3 point hitch and completely unhook all attachments before driving away from stand.

IMPORTANT: For stability reasons the stand has been designed with holes in all ends of the base. The end user is responsible for providing stakes to insert into the ground through the holes and for selecting a terrain that is suitable to securely anchor the stand. The stakes need to be at least 12" in length to prevent tipping of the unit.

#### **1.04 - Positioning Handle Assembly and Operation**

The positioning handle (see fig. 5) mounts on the post hole digger gearbox and allows to position accurately auger point on the ground from operator's seat. Raise handle to

move auger point towards the tractor or lower handle to move auger tip away from the tractor. This option is available for the Mole 200, 300 and 400 models.



#### 2 - SAFETY PRECAUTIONS

Safety is the primary concern in the design and manufacture of our products. Unfortunately our efforts to provide safe equipment can be wiped out by a single careless act of an operator. As manufacturers of post hole diggers, we want to confirm to you, our customers, our concern for safety.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment. It is the operator's responsibility to read and understand all safety and operating instructions in the manual and to follow these.

Allow only properly trained personnel to operate the post hole digger. Working with unfamiliar equipment can lead to careless injuries. **Read the post hole digger manual,** and the manual for your tractor, before assembly or operating, to acquaint yourself with the machines. It is the post hole digger owner's responsibility, if this machine is used by any person other than yourself, is loaned or rented, to make certain that the operator, prior to operating, reads and understands the operator's manuals and is instructed in safe and proper use. Review frequently the safety precautions for the post hole digger and tractor with all operators.

Our current production of machines include, as standard equipment, guards or shields for auger adapters, drivelines, input shafts, and safety signs. Older machines can be retrofitted to add these new guards or shields and, of course, safety signs. If you have an older machine which does not have current standard safety equipment or if you are unsure, please contact your dealer about bringing your machine up to the current level of safety.

Do not modify the equipment in any way. Unauthorized modifications may impair the function and/or safety and could affect the life of the equipment.

Do not exceed the limits of any equipment and operate only in daylight or good artificial light.

#### 2.01 - Preparation



CAUTION: Working with unfamiliar equipment can lead to careless injuries. Read the post hole digger manual, and the manual for your tractor, before assembly or operating, to acquaint yourself with the machines. It is the post hole digger owner's responsibility, if this machine is used by any person other than yourself, is loaned or rented, to make certain that the operator, prior to operating:

- 1. Reads and understands the operator's manual.
- 2. Is instructed in safe and proper use.



WARNING: The majority of accidents involve entanglement on the driveline or auger. The risk of entanglement becomes greater when you replace our shear bolts or auger retaining bolts with bolts longer than those specified by the manufacturer. This improper replacement occurs most often on machines that are loaned or rented to someone who has not read the operator's manual and is not familiar with a post hole digger.

- 1. This post hole digger is designed for one-man operation from the tractor seat. It is the responsibility of the operator to see that no one is within twenty-five feet (25') of the digger when it is started. Do not operate the digger with another person, small children, and/or pets near, or in contact with, any part of the digger, PTO driveline, or auger. Serious personal injury or death may result if any attempt is made to assist digger operation by hand. Stop operation whenever anyone comes within the operating area.
- 2. The use of this equipment is subject to certain hazards which cannot be protected against by mechanical means or product design. All operators of this equipment must read and understand this entire manual, paying particular attention to safety and operating instructions prior to using. If there is something in the manual which you do not understand, ask your supervisor or your dealer to explain it to you.
- 3. Most accidents occur because of neglect or carelessness. Keep all helpers and bystanders twenty-five feet (25') away from the operating digger. Only properly trained people should operate this machine. It is recommended the tractor be equipped with a Rollover Protection System (ROPS) and a seat belt. Always stop the PTO, set brake, shut off the tractor engine, remove the tractor key and allow auger to come to a complete stop before dismounting tractor. Never leave equipment unattended with the tractor running.
- 4. Please remember it is important that you read and heed the safety signs on the digger and the safety rules set forth. Clean or replace all safety signs if they cannot be clearly read and understood. Do not paint over, remove, or deface any safety decals on your equipment. They are there for your safety, as well as the safety of others. The safe use of this machine is strictly up to you, the operator.
- 5. All things with moving parts are potentially hazardous. There is no substitute for a cautious, safe-minded operator who recognizes potential hazards and follows reasonable safety practices. The manufacturer has designed this digger to be used with all its safety equipment properly attached, to minimize the chance of accidents. Study this manual to make sure you have all safety equipment attached.
- 6. If a safety shield is removed for any reason, it must be replaced before the machine is again operated. Always use and maintain in place all power take off guards furnished with the tractor as well as the power take off guards and shields furnished with the digger. Ensure the anti-rotation chain is secured to the hole in the driveline guard.
- 7. This digger is designed for use only on tractors with a 540 rpm power take off.

SAFETY PRECAUTIONS 10 BEFCO

8. When use of hand tools are required to perform any part of assembly, installation, adjustment, maintaining, repairing, removal, or moving the digger, be sure the tools used are designed and recommended by the tool manufacturer for the specific task.

- 9. Personal protection equipment including hard hat, hearing protection, safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintaining, repairing, removal, or moving the digger. Do not allow long hair, loose fitting clothing or jewelry to be around moving parts.
- 10. Always use two people to handle heavy, unwieldy components during assembly, installation, removal, or moving the digger.
- 11. Never place any part of your body where it would be in danger if movement should occur during assembly, installation, operation, maintaining, repairing, removal, or moving the digger.
- 12. Never place yourself between the tractor and the digger while the implement is in operation.
- 13. Do not walk or work under a raised digger or attachment unless it is securely blocked or held in position. Do not depend on the tractor hydraulic system to hold the implement or attachment in place.
- 14.A heavy load can cause instability of the tractor. Use extreme care during travel. Slow down on turns and watch out for bumps. The tractor may need front counterweights to counter balance the weight of the digger.
- 15. Never use alcoholic beverages or drugs which can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription or over-the-counter medications.
- 16. Do not allow riders on the digger or tractor at any time. There is no safe place for riders.
- 17. Before you operate the digger, check over all pins, bolts, and connections to be sure all are securely in place. Replace any damaged or worn parts immediately.
- 18. Consult local utility companies to make certain there are no buried gas lines, electrical cables, etc., in the work area before beginning operation.
- 19. Do not allow anyone who is not familiar with the safety rules and operation instructions to use this post hole digger.
- 20. Never allow children to operate or be around this digger.
- 21. Use stabilizer bars, adjustable sway chains, or sway blocks on your tractor lift arms to keep the post hole digger from swinging side to side. Adjust as tightly as practical for best performance.
- 22. Never replace the shear bolt or auger retaining bolt with any length other than what is specified in this manual. A longer or protruding fastener is more likely to grab loose clothing or gloves, which can result in serious injury or death.
- 23. Clear the work area of objects, such as stones or branches, which might be picked up and thrown or entangled in the auger.
- 24. To prevent possible rapid wear of U-Joints and possible failure of drivelines, never lift auger more than 12" off the ground with PTO operating.
- 25. To prevent possible instantaneous driveline failure, never move digger from hole to hole or transport while auger is rotating. This could lead to injury from flying pieces of the failed driveline.

SAFETY PRECAUTIONS 11 BEFCO

26. Do not operate digger on steep hillsides. When digging on uneven or hilly terrain, position the tractor with the post hole digger uphill. With the post hole digger downhill, the tractor could tip when attempting to pull the auger from its hole.

- 27. Never position the auger point by hand when the tractor is running.
- 28. Never position the auger point by putting your hands on the auger, gearbox, boom, or driveline.
- 29. Keeps body parts, hands, feet, hair, jewelry, and clothing away from all moving and/or rotating parts.
- 30. To prevent entanglement and possible serious injury or death, never use body weight to try to push auger into the ground.
- 31. Worn edges or a slightly rounded point can seriously affect auger penetration. Check for wear before each use. Replace as necessary.
- 32. Do not shovel dirt away from a rotating auger as the shovel can be caught and thrown by the auger.
- 33. Do not operate the post hole digger without all safety shields and guards in place.
- 34. Shut off PTO and wait for the auger to stop movement before transporting.
- 35. Always use care when operating a post hole digger.

#### 2.02 - Starting and Stopping



- 1. Be sure that no one is near the machine prior to engaging or while the machine is working.
- 2. Be sure the tractor is in "Neutral" before starting engine.
- 3. Post hole digger operating power is supplied from tractor PTO. Refer to your tractor manual for PTO engagement and disengagement instructions. Always operate PTO at 540 rpm. Know how to stop the tractor and post hole digger quickly in case of an emergency.
- 4. When engaging PTO, the engine rpm should always be low. Once engaged and ready to start using, raise PTO speed to 540 rpm and maintain throughout operation.
- 5. Check the tractor master shield over the PTO stub shaft. Make sure it is in good condition and fastened securely to the tractor. Purchase a new shield if old shield is damaged or missing.
- 6. After striking an obstacle, disengage the PTO, shut the tractor down and thoroughly inspect for damage before restarting.
- 7. Never engage the PTO until the post hole digger is in the down position and resting on the ground. Never raise the post hole digger until the auger has come to a complete stop.
- 8. Take all possible precautions when leaving unit unattended: disengage PTO, set parking brake, stop engine, and remove key form ignition. Park in level area.

SAFETY PRECAUTIONS 12 BEFCO

#### 2.03 - Messages and Signs



1. Read and adhere to all safety and operating decals on this machine (see post hole digger Operator's Manual).

- 2. Before dismounting tractor: allow moving parts to stop, stop engine, set brake and remove the key of unattended equipment.
- 3. Keep away from rotating auger and driveline.
- 4. Keep guards and shields in place and in good condition.
- 5. Do not use with bystanders in area.
- 6. Allow no riders on the tractor.
- 7. Allow moving parts to stop before repair.
- 8. Securely support post hole digger before performing any maintenance.

Additional warning and operating decals are available at no extra charge. Please specify model and serial number when ordering.



# **Parts Manual**

# POST HOLE DIGGER ACCESSORIES

#### **DOWN FORCE KIT**

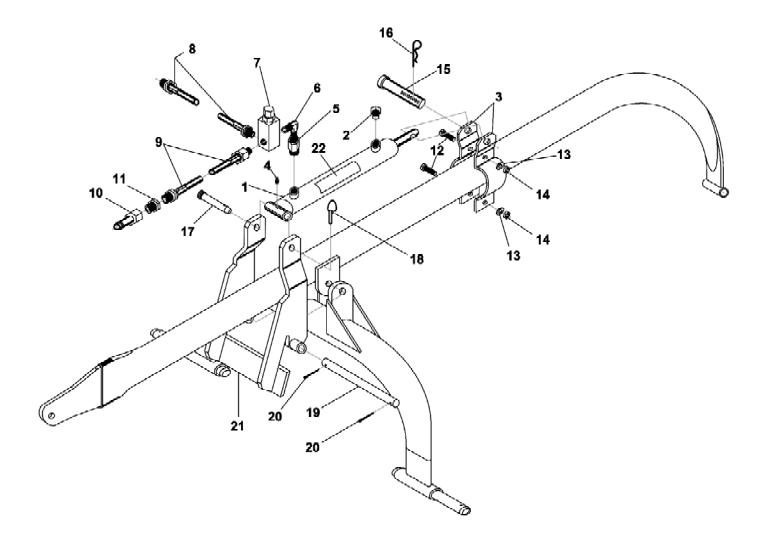
5BPPHD002 (fits models PHD300 & 400) 5BPPHD005 (fits model PHD200)

#### **HOOKUP STAND**

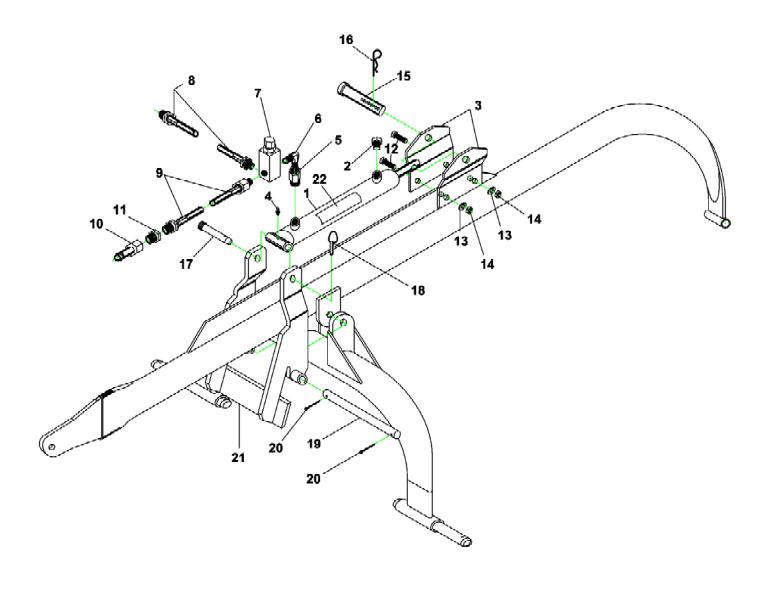
5BP0099851 (fits models PHD100, 200, 300 & 400)

#### **POSITIONING HANDLE**

5BPPHD003 (fits models PHD200, 300 & 400)

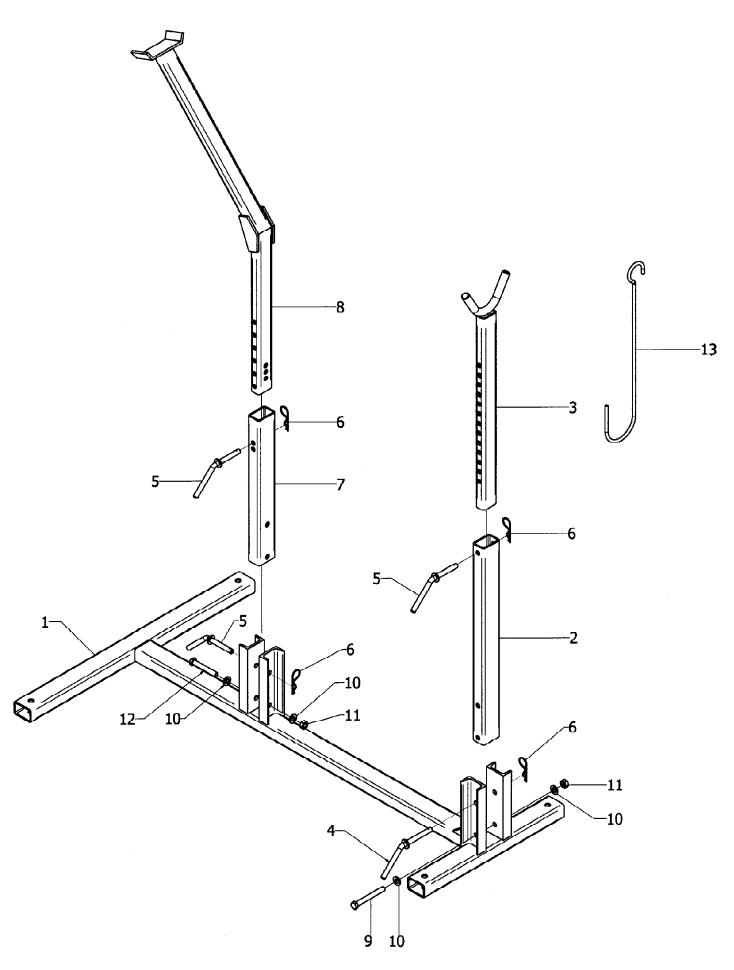


Ref.	Part #	Description	Qty.
1	503-824B	Hydraulic cylinder	1
2	503-953B	Breather plug w/o-ring	1
3	503-954B	Mounting plate	2
4	502-447B	Grease fitting	1
5	503-829B	Hydraulic bushing ½" fp x ¾" mp o-ring adapter	1
6	503-828B	90° Elbow ½" mp x ½" mp	1
7	503-823B	Relief valve	1
8	503-826B	Hydraulic hose <sup>3</sup> / <sub>8</sub> "x40" w/fittings ½" mp x ½" mp	1
9	503-825B	Hydraulic hose 1/4"x40" w/fittings 1/2" mp x 3/8" mp	1
10	502-170B	½" Quick connector nipple ½" fp	1
11	502-169B	Hydraulic bushing ½" mp x 3/8" fp	1
12	503-700B	Hex bolt 1/2"x13/4"	2
13	190-2056	Lock washer ½"	2
14	502-418B	Hex nut ½"	2
15	503-833B	Pin ¾"x3"	1
16	503-834B	"R" clip	1
17	503-835B	Pin ¾"x3 <sup>7</sup> / <sub>8</sub> "	1
18	001-8266	Lynch pin	1
19	503-832B	Pin 1"x9¾"	1
20	503-442B	Cotter pin	2
21	503-863B	Support	1
22	950-408B	Decal "WARNING - High pressure hydraulic oil leaks"	1
	PHD-005	Hydraulic down pressure kit complete (Mole 200)	-

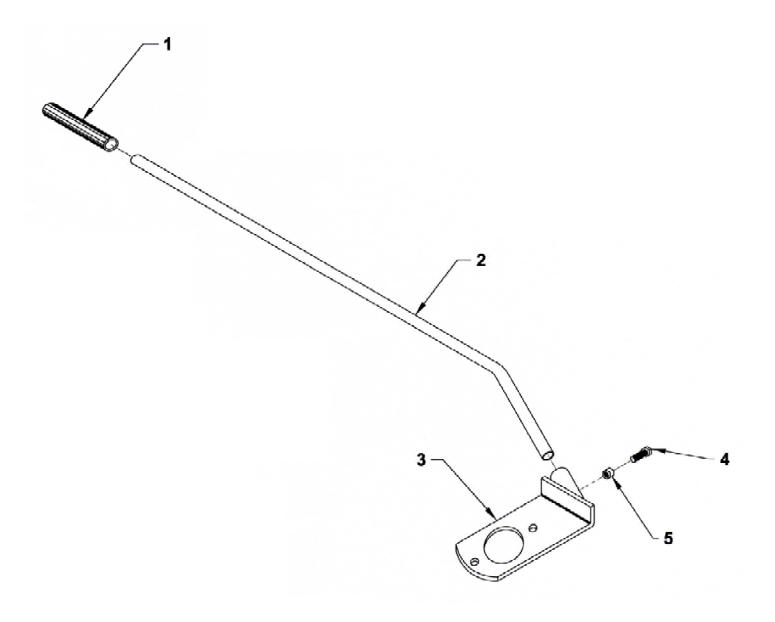


18

Ref.	Part #	Description	Qty.
1	503-824B	Hydraulic cylinder	1
2	503-953B	Breather plug w/o-ring	1
3	503-845B	Mounting plate	2
4	502-447B	Grease fitting	1
5	503-829B	Hydraulic bushing ½" fp x ¾" mp o-ring adapter	1
6	503-828B	90° Elbow ½" mp x ½" mp	1
7	503-823B	Relief valve	1
8	503-826B	Hydraulic hose <sup>3</sup> / <sub>8</sub> "x40" w/fittings ½" mp x ½" mp	1
9	503-825B	Hydraulic hose 1/4"x40" w/fittings 1/2" mp x 3/8" mp	1
10	502-170B	½" Quick connector nipple ½" fp	1
11	502-169B	Hydraulic bushing ½" mp x 3/8" fp	1
12	503-700B	Hex bolt ½"x1¾"	2
13	190-2056	Lock washer ½"	2
14	502-418B	Hex nut ½"	2
15	503-833B	Pin ¾"x3"	1
16	503-834B	"R" clip	1
17	503-835B	Pin <sup>3</sup> / <sub>4</sub> "x3 <sup>7</sup> / <sub>8</sub> "	1
18	001-8266	Lynch pin	1
19	503-832B	Pin 1"x9¾"	1
20	503-442B	Cotter pin	2
21	503-863B	Support	1
22	950-408B	Decal "WARNING - High pressure hydraulic oil leaks"	1
	PHD-002	Hydraulic down pressure kit complete (Mole 300 & 400)	-



Ref.	Part #	Description	Qty.
1	001-8100	Stand base	1
2	001-8107	Long bending tube	1
3	001-8110	Support tube	1
4	001-8114	Pin	1
5	011-8114	Pin	3
6	005-4422	Cotter pin Ø2.5	4
7	001-8120	Short bending tube	1
8	001-8125	Gearbox support tube	1
9	003-4286	Bolt M12x100	1
10	000-2265	Flat washer Ø12	4
11	003-0064	Nut M12	2
12	009-1495	Bolt M12x80	1
13	005-2872	Driveline hook	1
	009-9851	Hookup stand complete	-



Ref.	Part #	Description	Qty.
1	503-876B	Handle grip	1
2	503-969B	Handle tube	1
3	503-970B	Gearbox mounting plate	1
4	000-6349	Bolt M10x20	1
5	000-1279	Nut M10	1
	PHD-003	Positioning handle complete	-

### Use only original spare parts

All rights reserved. It is unlawful to copy, reprint or use any of the information or details in this manual without the expressed written permission of the Company. Technical information provided in this manual is approximate, the Company reserves the right to modify or improve the models shown for technical or commercial purposes. Pictures in this manual do not necessarily show the machine as delivered.



P.O. Box 6036 Rocky Mount, NC 27802-6036

Tel.: 252.977.9920 - Fax: 252.977.9718

www.befco.com

