



# HDA Walk-Behind Trowel

## MULTIQUIP Clutch Retrofit Kit Installation Instructions

The following instructions are intended to assist the user in the installation of a CVTech clutch system. The CVTech clutch system replaces the Comet CVT system. Please read all assembly instructions before installing the kit.

### REQUIRED TOOLS

- Ratchet/Socket Set
- Open/box-end wrenches
- Philips Head Screwdriver
- Clutch Puller
- Blue Loctite™ #246

### PARTS

Verify that all parts are accounted for. See Figure 1 and Table 1.

### WORK SAFELY!

Only a **qualified service technician** with proper training should perform this installation. Follow all shop safety rules when performing this installation.

### DISCONNECT SPARK PLUG CABLE

To prevent accidental starting, disconnect the spark plug cable from the spark plug prior to beginning work on the trowel.

| Table 1. HDA Clutch Retrofit Kit Parts |          |                                   |      |                     |
|--|----------|-----------------------------------|------|---------------------|
| Item                                   | Part No. | Description                       | Qty. | Remarks             |
| 1                                      | 0161 C   | Washer, Lock 5/16 Med             | 4    |                     |
| 2                                      | 0166 A   | Washer, Lock, 3/8 Med.            | 1    |                     |
| 3                                      | 1580     | Key, Sq 3/16 X 3.0                | 1    |                     |
| 5                                      | 10136    | Washer, Flat SAE 3/8              | 1    |                     |
| 6                                      | 10229    | Screw, HHC 5/16-24 X 1"           | 4    |                     |
| 7                                      | 12287    | Screw, THP 1/4-20 X 3/4 Ss        | 3    |                     |
| 9                                      | 22613    | Clutch, CVT Drive HD              | 1    |                     |
| 10                                     | 22614    | Clutch, CVT Driven HD             | 1    |                     |
| 11                                     | 22617    | Belt, CVT HD Walk Behind          | 1    |                     |
| 12                                     | 22626    | Screw, HHC 3/8-24 X 5             | 1    |                     |
| 13                                     | 22627    | Screw, HHC 3/8-24 X 1-1/4         | 1    |                     |
| 14                                     | 22631    | Washer, Clutch Retainer           | 1    |                     |
| 15                                     | 22362    | Key, Steel .188 X .250 X 2.063    | 1    |                     |
| 16                                     | 22633    | Spacer, CV Tech Clutch            |      |                     |
| 18                                     | 22739    | Lift Bale Weldment, CV Tech Retro | 1    |                     |
| 19                                     | 22742    | Guard, Belt CV Tech Clutch Retro  | 1    |                     |
| 20                                     | 29452    | Nut, Blind 1/4-20 X .165-.260     | 3    |                     |
| 22                                     | 22740    | CV Tech Retro Kit, HD             | 1    | Includes Items 1-20 |

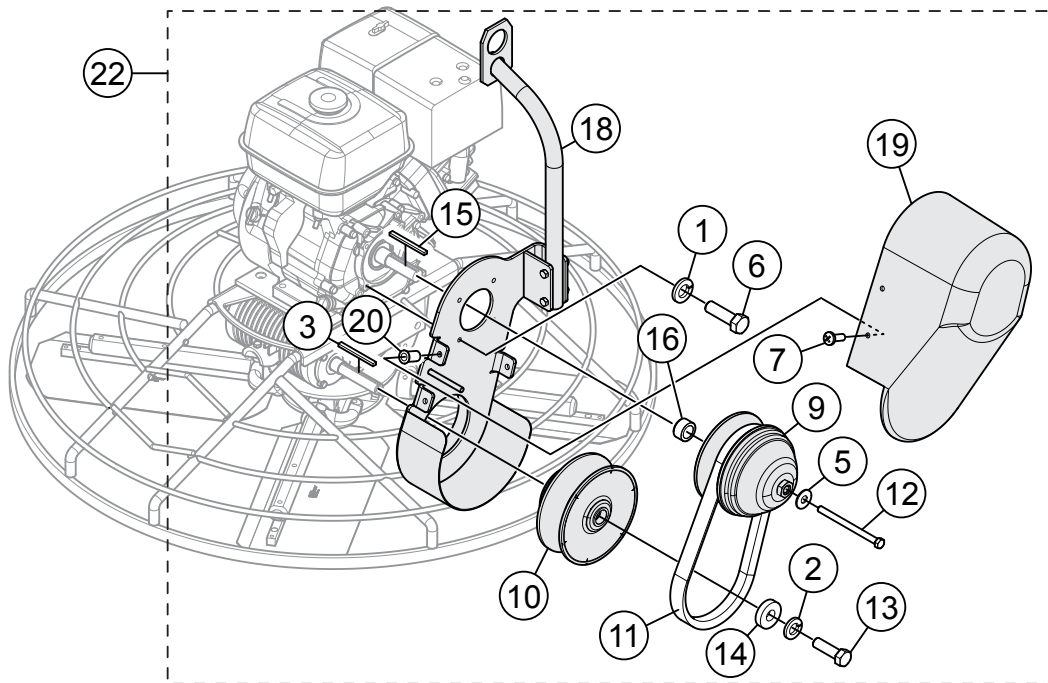
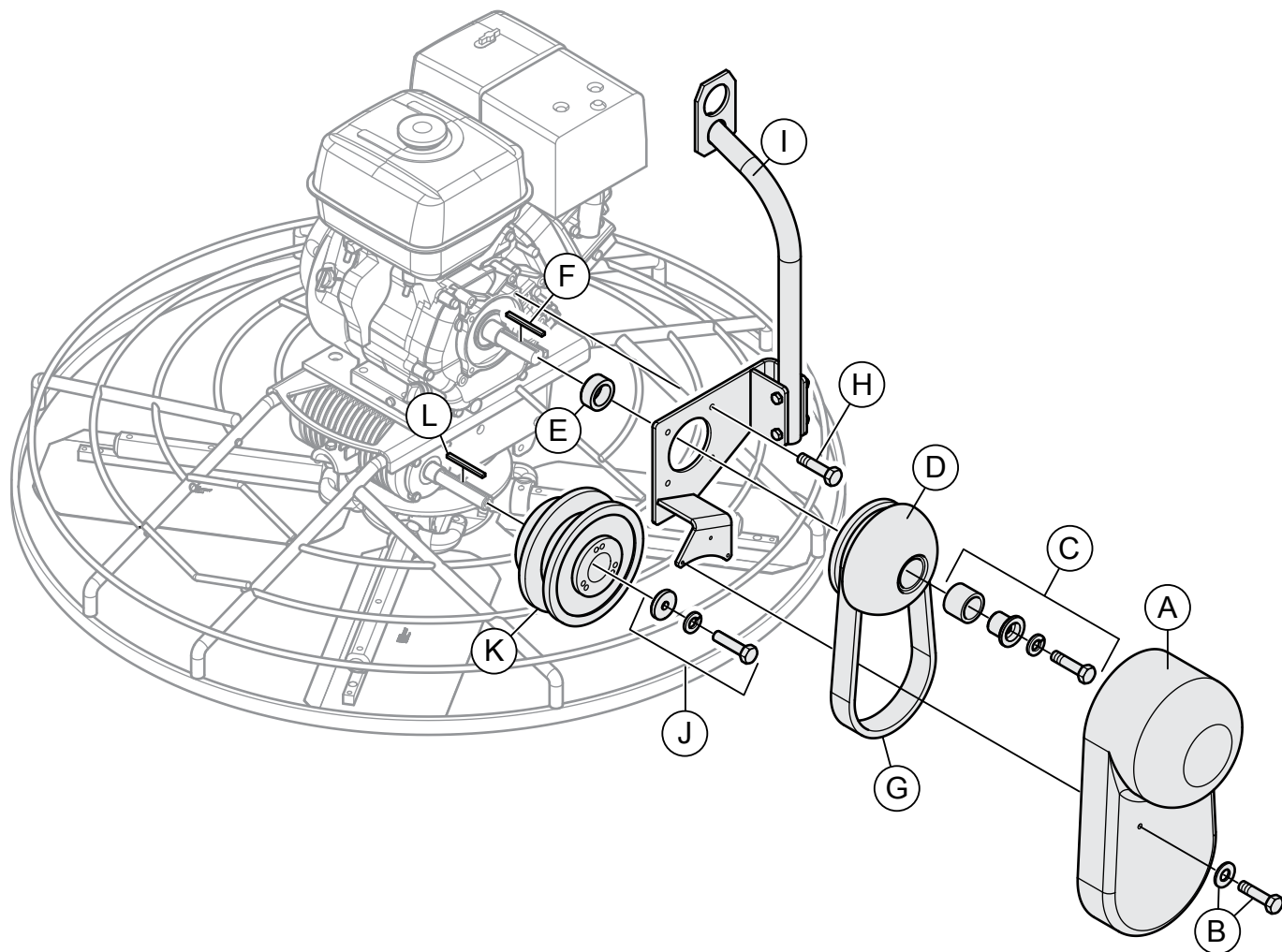


Figure 1. HDA Clutch Kit



**Figure 2. Remove Drive Assembly**

## DRIVE ASSEMBLY REMOVAL

Refer to Figure 2.

### Belt Guard Removal

1. Remove and discard belt guard (item A) and mounting hardware (item B).

### Belt Removal

1. Remove and discard belt (item G). The Comet belt will not be used in the reassembly.

### Clutch Removal

1. Remove and discard the center bolt, washer, retainer and spacer (item C) that secure the clutch (item D) to the engine shaft.
2. Pull clutch off engine shaft. Puller may be required to remove clutch.

3. Discard Comet clutch. This item will not be used in the reassembly.
4. Remove and discard clutch spacer (item E) from engine shaft
5. Remove and discard square key (item F) from engine shaft.

### Lifting Bale Removal

1. Remove and discard the mounting hardware (item H) that secures the lifting bale (item I) to the engine.
2. Remove and discard the lifting bale.

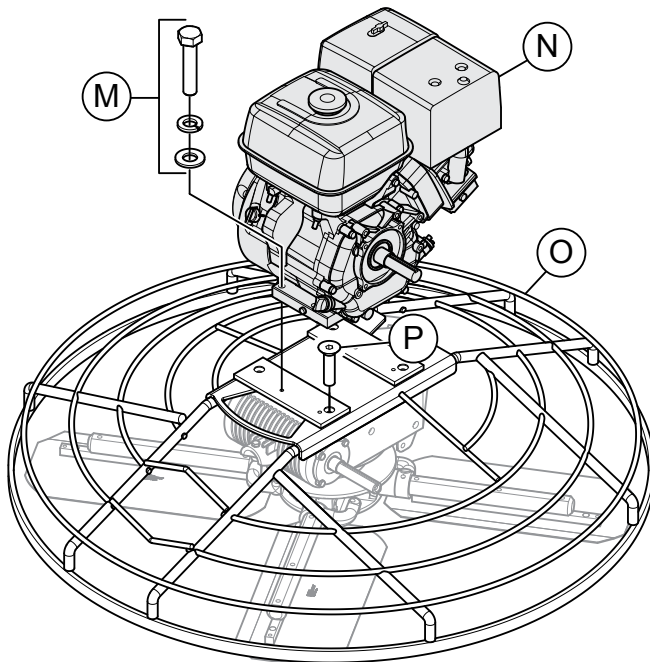
## Lower Pulley Removal

1. Remove and discard the center bolt, washer and retainer (item J) that secure the lower pulley (item K) to the gearbox shaft.
2. Pull lower pulley off gearbox shaft and discard.
3. Remove square key (item L) from gearbox shaft and discard.

## REMOVE ENGINE/DISCONNECT GUARD RING

The engine must be temporarily removed and the guard ring must be disconnected to allow enough room to install the new lifting bale. See Figure 3.

1. Remove the mounting hardware (item M) that secures the engine (item N) to the guard ring (item O).
2. Remove the engine and set aside.
3. Remove the four screws (item P) that secure the guard ring to the gearbox. Set screws aside in a clean, safe place.

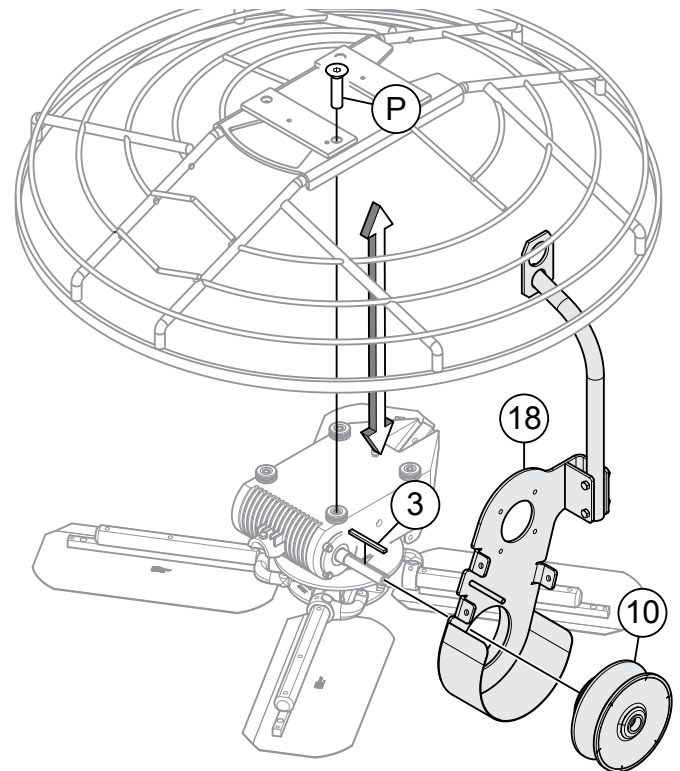


**Figure 3. Remove Engine and Disconnect Guard Ring**

## INSTALL NEW LIFTING BALE/LOWER PULLEY

Refer to Figure 4.

1. Lift the guard ring up to place the new lifting bale (item 18) around the gearbox shaft.
2. Place the new square key (item 3) in the gearbox shaft.
3. Install the lower pulley (item 10) around the gearbox shaft.
4. Lower guard ring back onto the gearbox and secure with the four screws (item P) that were previously removed.

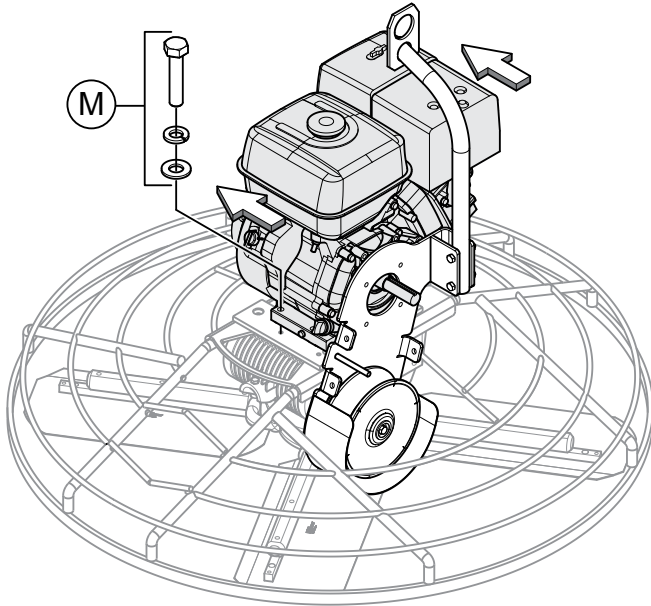


**Figure 4. Install Lifting Bale and Lower Pulley**

## Reinstall Engine

See Figure 5.

1. Reinstall engine by loosely threading the mounting bolts with washers (item M) into the guard ring and pushing the engine as far as it will go in the direction away from the engine shaft. This will align the engine properly for the installation of the upper clutch.
2. Tighten the engine mounting bolts.

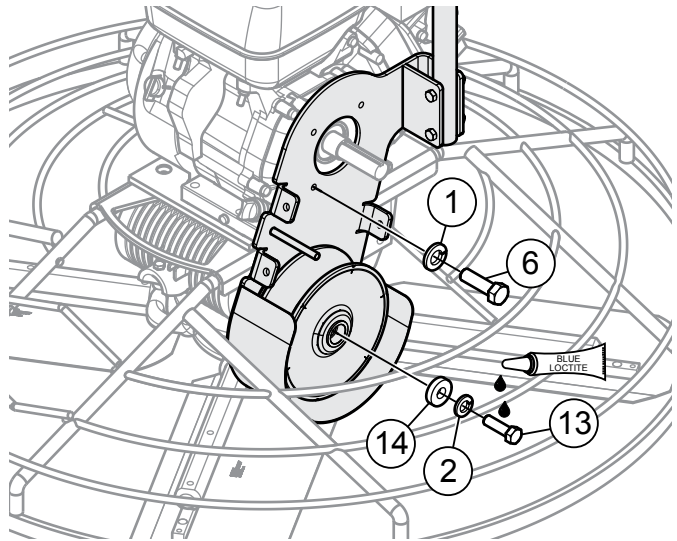


**Figure 5. Reinstall Engine**

## Secure Lifting Bale and Lower Pulley

See Figure 6.

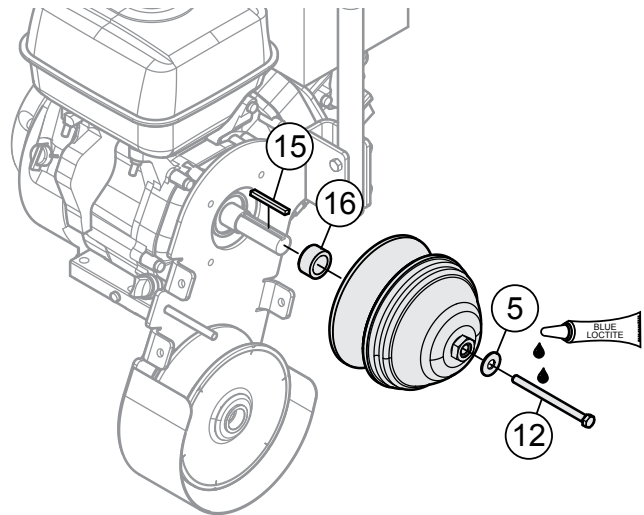
1. Secure the lifting bale to the engine using four screws (item 6) and lock washers (item 1).
2. Secure the lower pulley to the gearbox shaft with the new center bolt (item 13), lock washer (item 2), and clutch retainer washer (item 14). Apply Blue Loctite™ #246 to center bolt and tighten.



**Figure 6. Secure Lifting Bale and Lower Pulley**

## INSTALL UPPER CLUTCH

1. Install new engine clutch spacer (item 16) on engine shaft. See Figure 7.
2. Install shaft key (item 15) in engine shaft. See Figure 7.
3. Mount upper clutch onto engine shaft with clutch retaining screw (item 12) and washer (item 5). Apply Blue Loctite™ #246 to screw and tighten with ratchet. See Figure 7.



**Figure 7. Install Upper Clutch**

## INSTALL NEW BELT

1. Slip new belt (item 11) into the grooves of the upper clutch and lower pulley. See Figure 8.

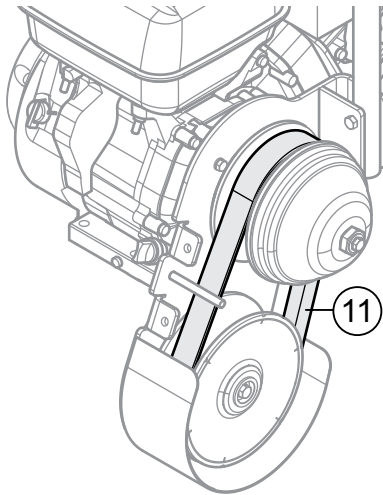


Figure 8. Install Belt

## INSTALL NEW BELT GUARD

See Figure 9.

2. Secure the new belt guard (item 19) to the lifting bale with three screws (item 7).

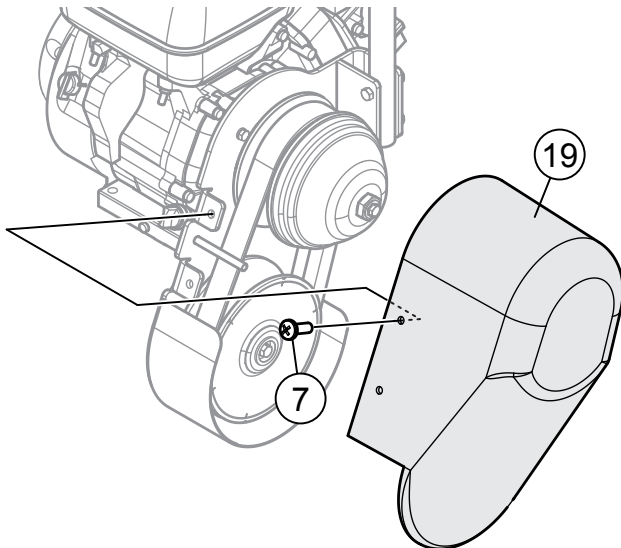


Figure 9. Install New Belt Guard

## STARTING THE TROWEL/TESTING

1. Reconnect spark plug cable.
2. Start the trowel as referenced in the Operator's Manual. Be sure to check the engine oil level prior to starting the engine.

### **CAUTION**

The engine's exhaust contains harmful emissions. **ALWAYS** have adequate ventilation when operating. Direct exhaust away from nearby personnel.

3. Run machine, bringing throttle up so clutch engages. Cycle the engine from idle to full throttle twice, and shut off engine.

# HDA CLUTCH RETROFIT KIT INSTALLATION INSTRUCTIONS

## 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

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800-478-1244 Fax: 310-943-2238

#### ***MQ Parts Department***

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

#### ***Warranty Department***

800-421-1244 Fax: 310-943-2249  
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Momoxpan, Cholula, Puebla 72760 Mexico Fax: (52) 222-285-0420  
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