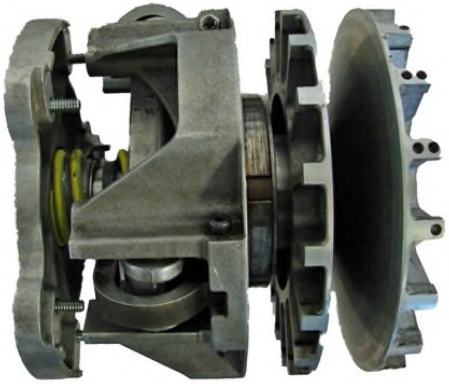
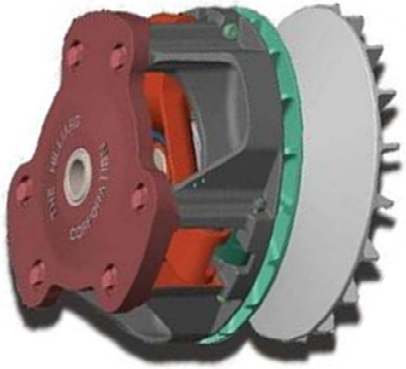
Multi-Clutch Rebuild
Disassembly and Inspection

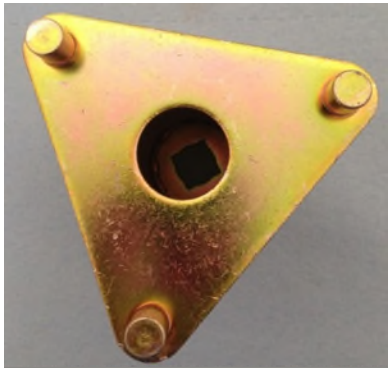




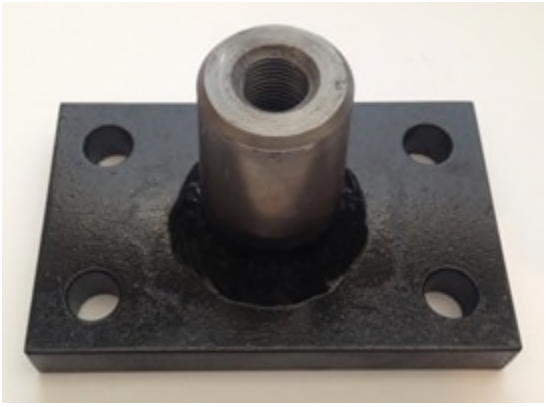
Service Tools Available

Service Tool – 23391

Spring Compressor



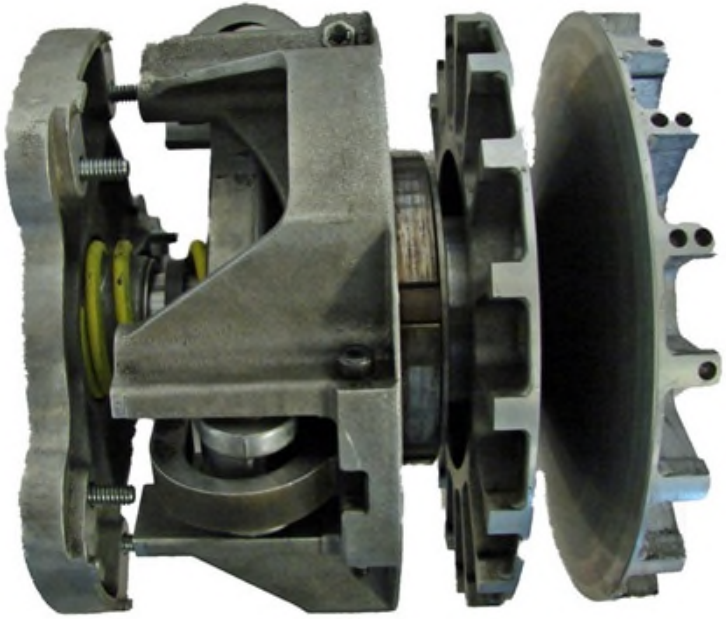
Spider Tool
30340



Service Tool – 23392

Upper Clutch Holder
Comes with bolt.

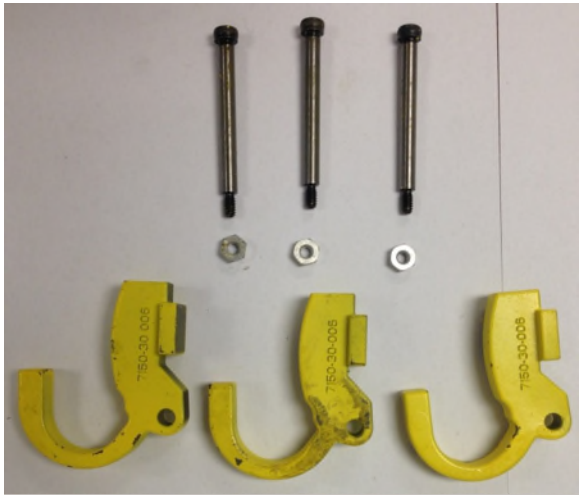
Primary Clutch



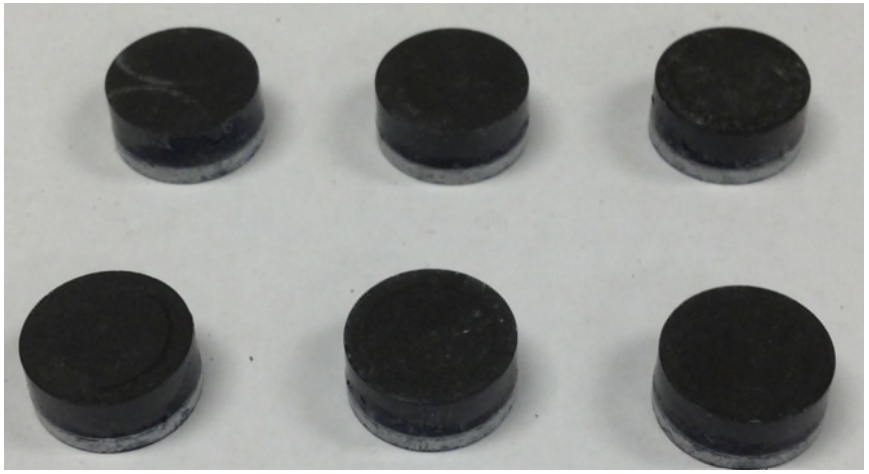
Primary Clutch HHN31/HHN34	P/N
COMPLETE CLUTCH – HHN31/34	23363-1
Service Tool – Primary	23392
Spider Kit -	23393
Thrust Washer Kit -	23398
Weight Kit – Weight, nut, screw (Color is Yellow)	23404
Button Kit – Qty 6 buttons	23405
Sheave Kit – sheaves, bearing, etc	23407
Spring Kit -	23406

Primary Clutch – HHNG5 ONLY	P/N
HHNG5 Weight Kit – Weight, nut, screw (Color is White)	32450
COMPLETE CLUTCH	32449

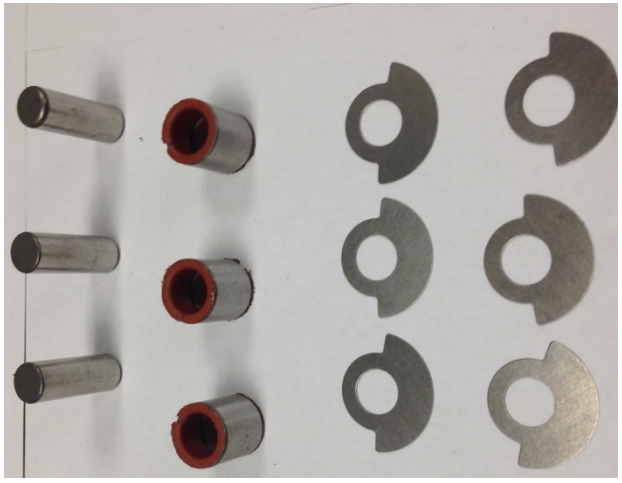
Primary Clutch – Service Kits



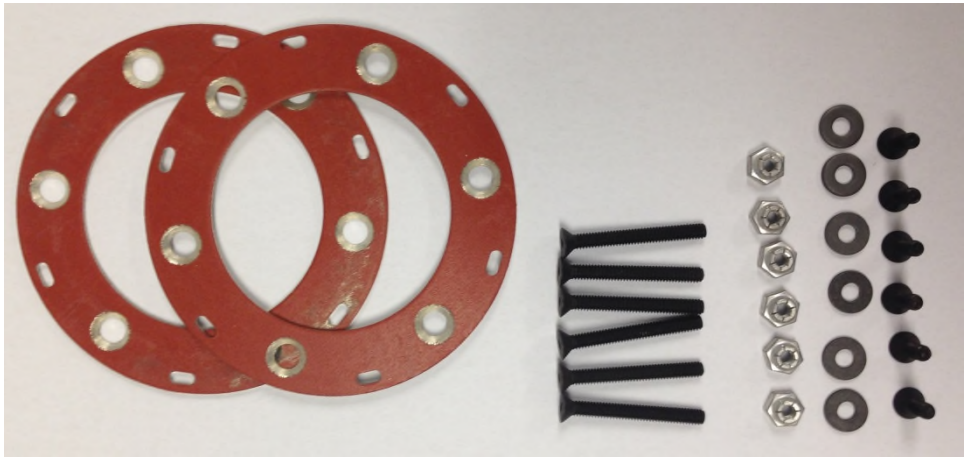
Weight Kit – 23404 (HHNG5 32450)



Button Kit - 23405



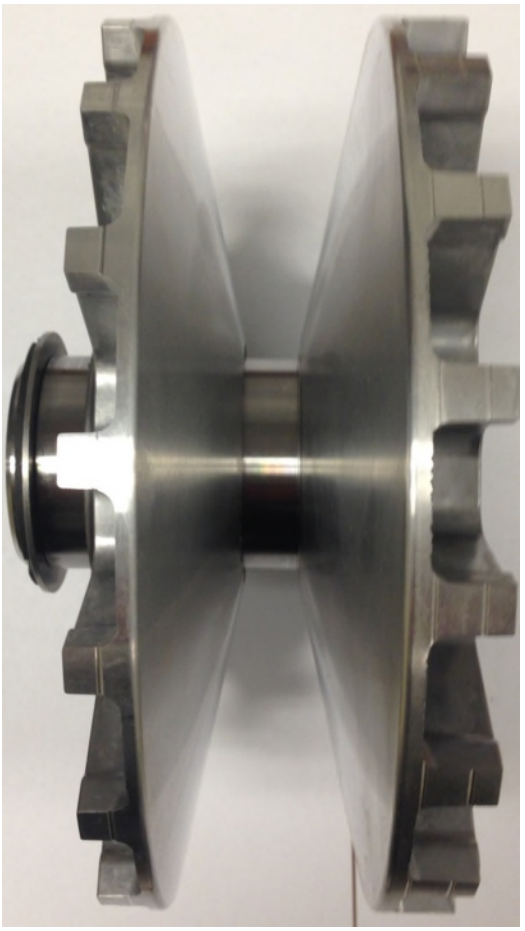
Spider Kit - 23393



Thrust Washer Kit - 23398

Primary Clutch – Service Kits

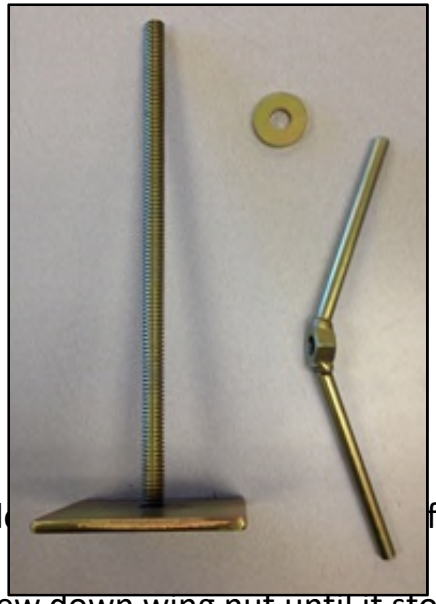
Spring Kit - 23406



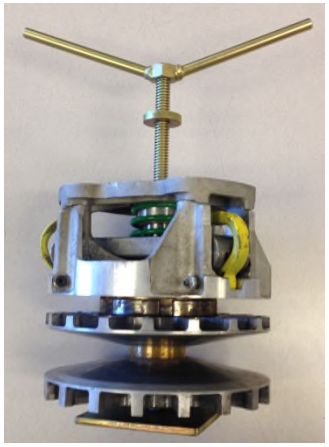
Sheave Kit - 23407

Prior to disassembly, “mark” the components so that they can be reassembled properly.

Insert threaded tool through the center of the MultiClutch.



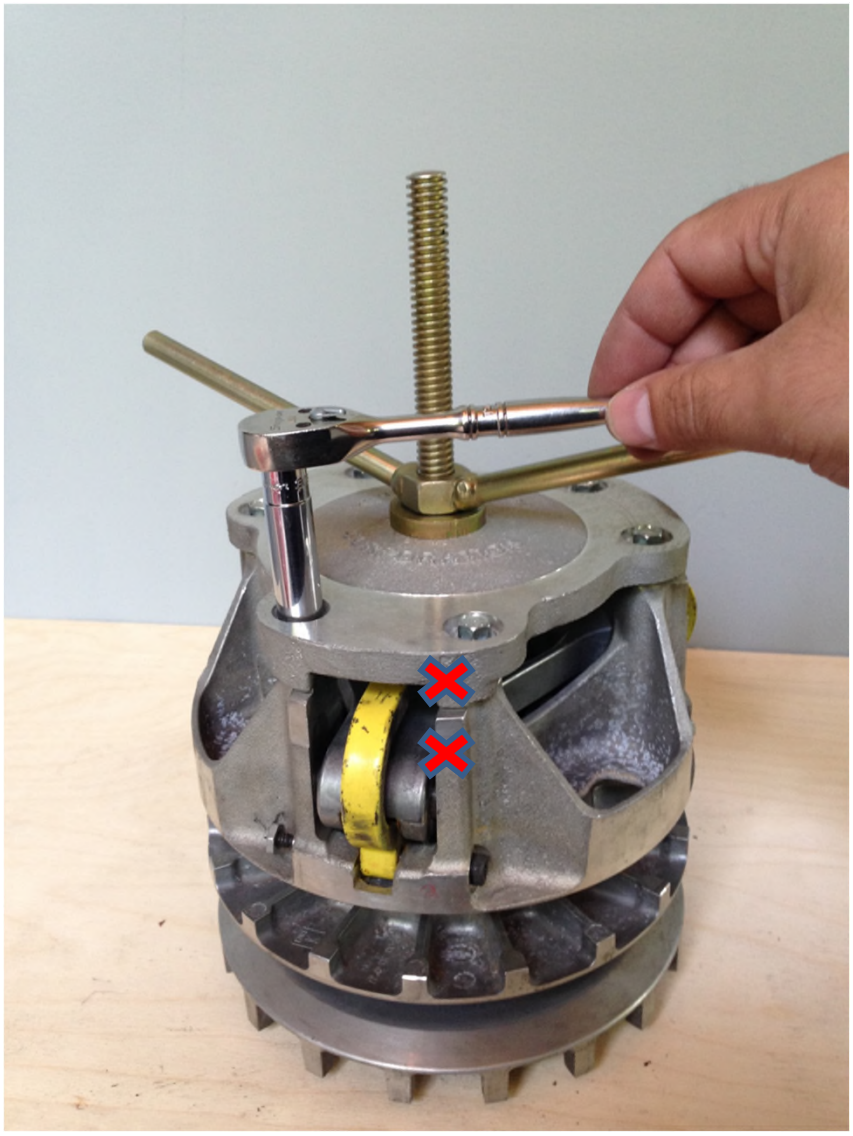
Slid ft.



Service Tool - 23391

Screw down wing nut until it stops on the washer.
Do not over tighten!

Remove the six threaded fasteners using a 3/8 socket.

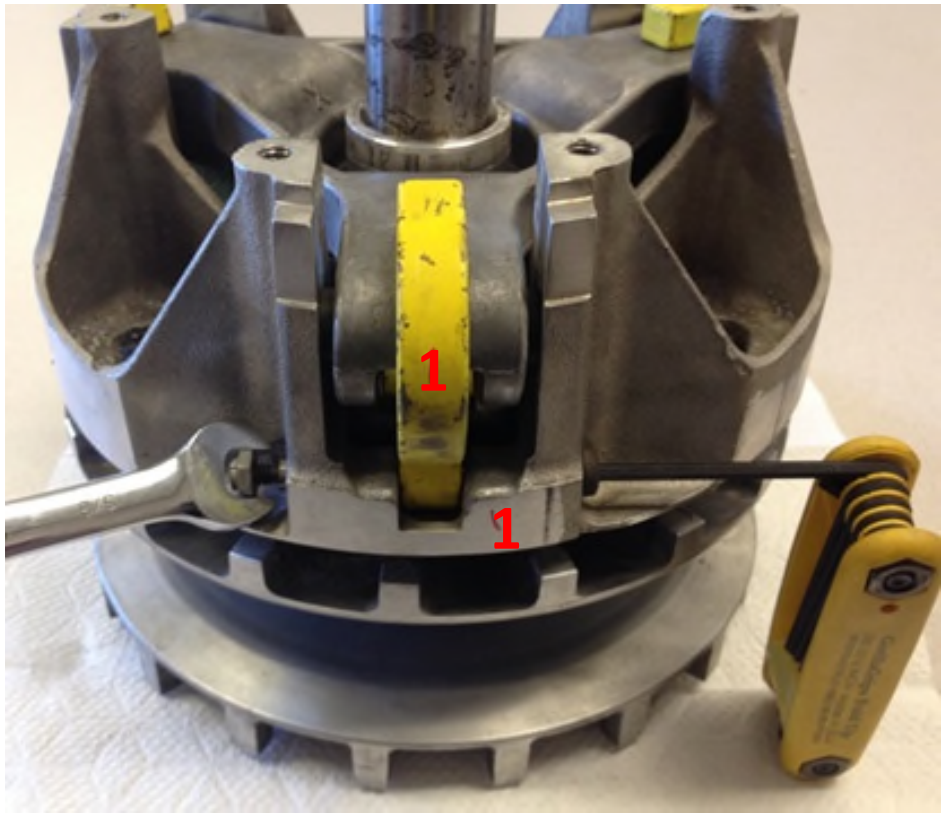


Unscrew the wing nut to relieve the spring tension safely.

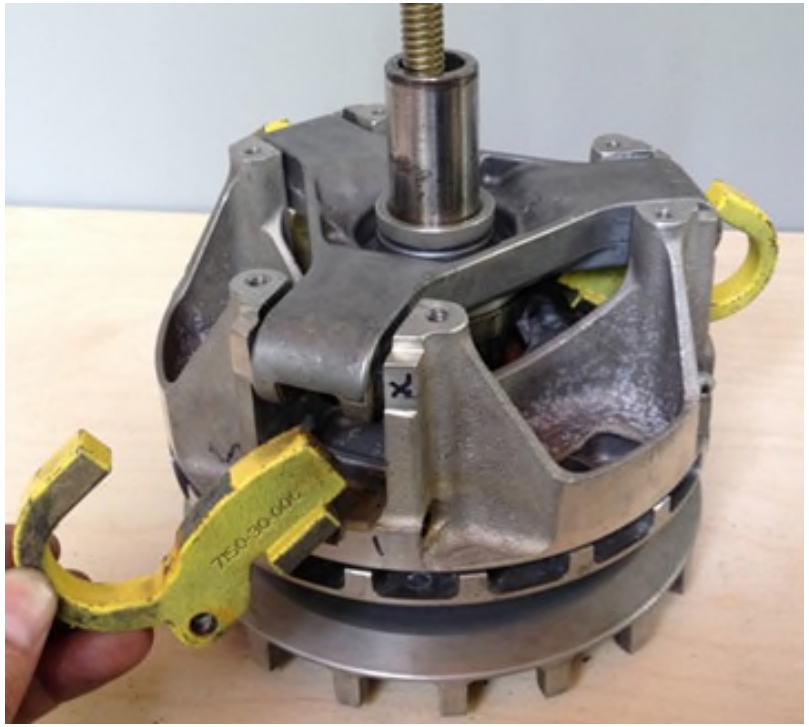
Remove the clutch cap and spring

Before you remove the clutch weights number each flyweight to its location for proper reassembly if not replacing them.

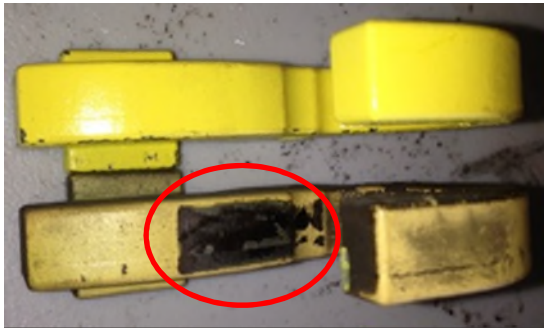
Unscrew the nut and remove the bolt holding the clutch weight in place



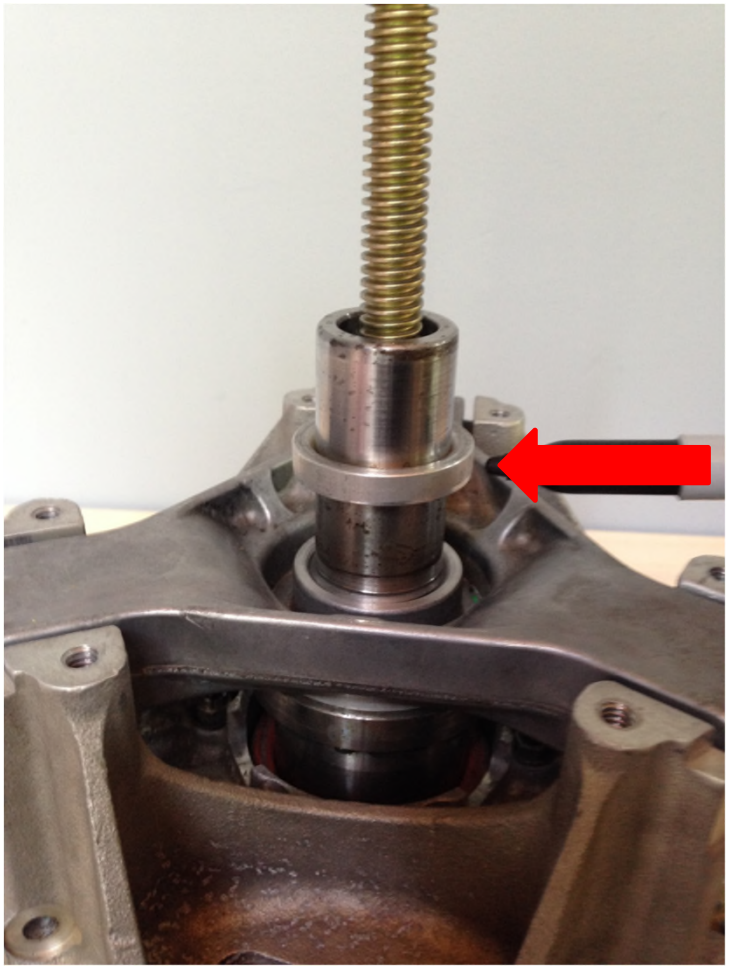
Remove the clutch weight and set aside



Wear Area to Inspect.



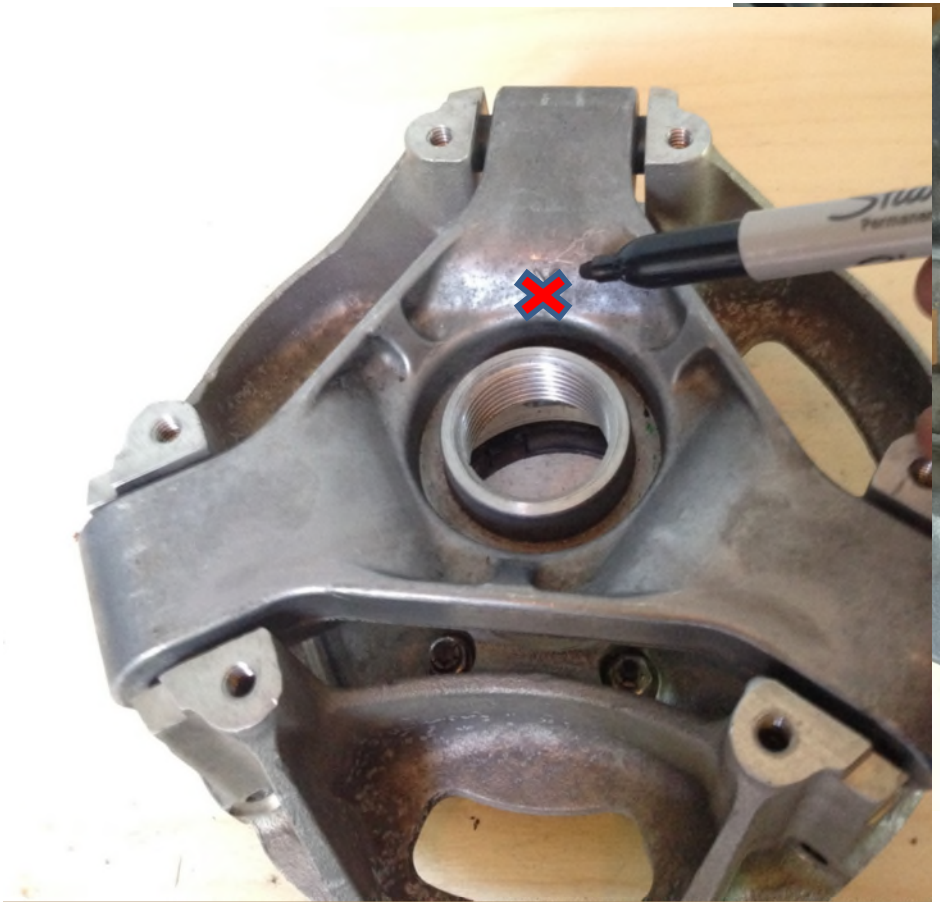
Remove the bearing cover

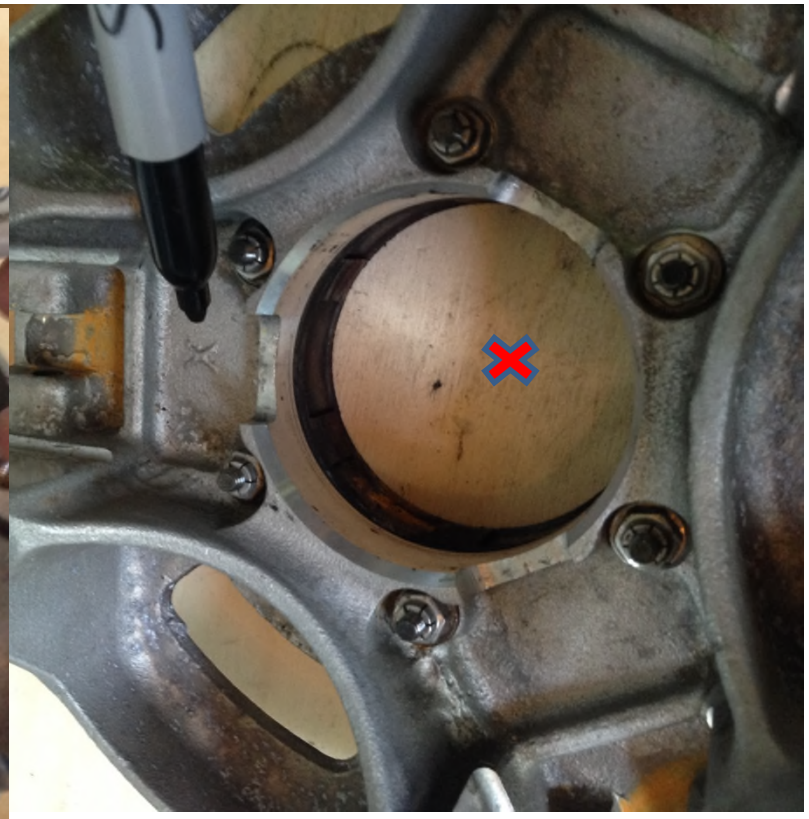


O-ring seal on the inner diameter of spacer.

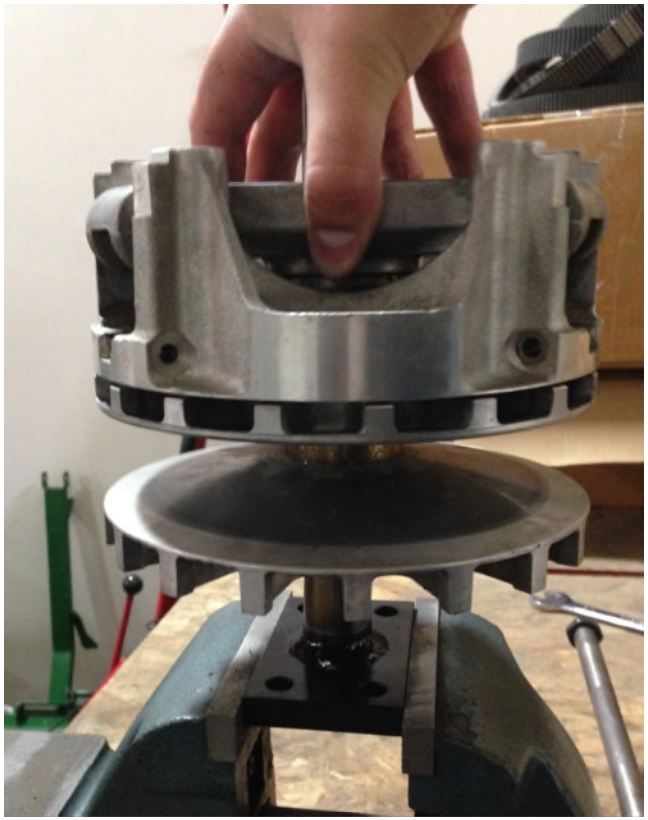
Prior to removing the spider from the Movable Sheave be sure to identify the X on the top of the spider

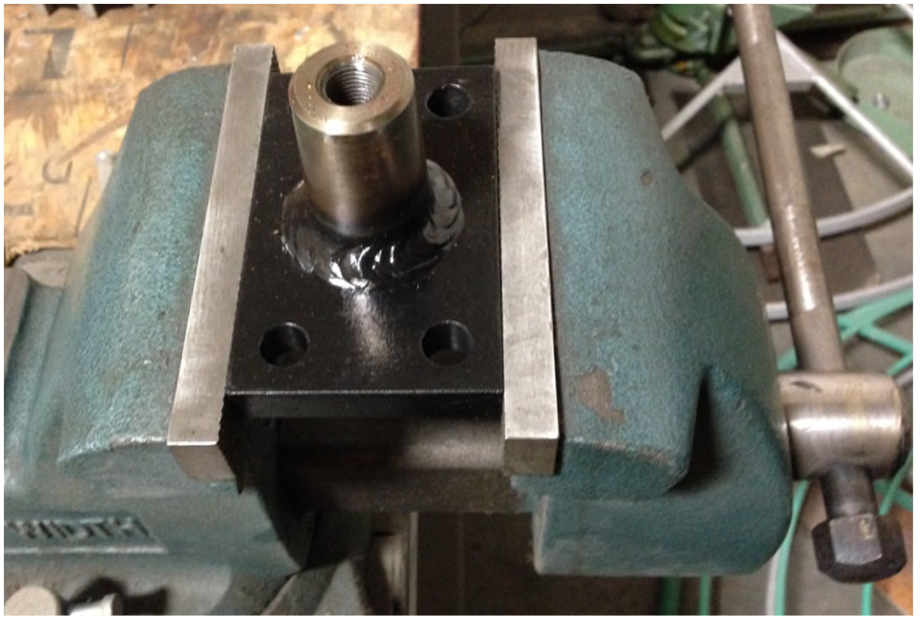
Be sure the X located on the Spider and the Movable Sheave are lined up when you reassemble the MultiClutch





To removed the threaded on spider section, securely mount the clutch using the service tool or a stub shaft.





Bolt the clutch assy to the tool or stub shaft.

Using the spider removal tool, unscrew the spider. Normal right hand thread.

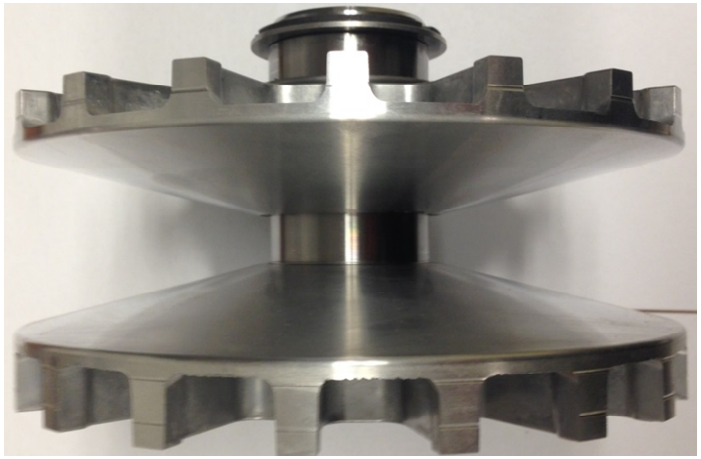
After you loosen the upper threaded portion of the clutch you can unthread and set aside

Slide the washer off the main shaft

Note: the notched portion of the washer always faces down

Sheave Assy.

The sheave assy can now be removed off the main shaft.
Clean or replace as needed.



Sheave Kit - 23407

Clutch puller tool can be used to remove the shaft from the holder tool

Spider Rebuild - rollers and buttons.

Parts breakdown from left to right

- Button
- Thrust Washer
- Roller Bushing
- Dowel
- Thrust Washer
- Button

Disassemble:

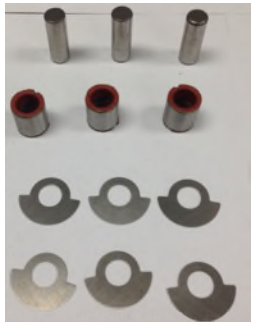
Remove the buttons and secure the spider so that it will not move, use a punch to drive out the dowel.

Reassemble:

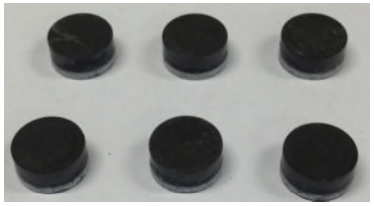
Reverse procedure

Replace all buttons,

Wear item!



Spider Kit - 23393



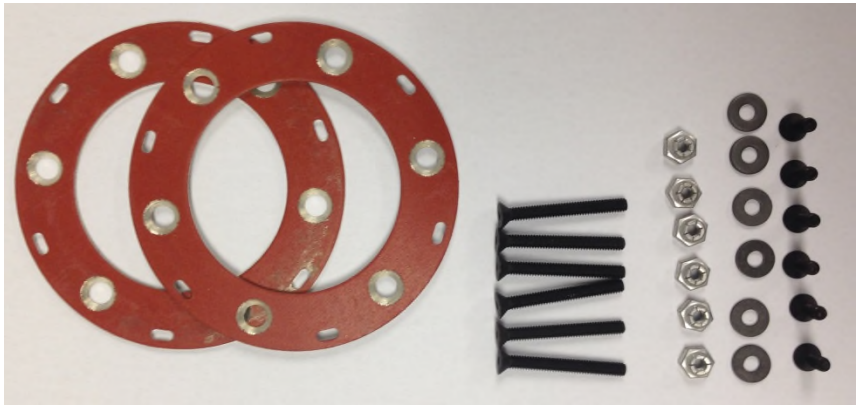
Button Kit - 23405

Thrust Washer Kit

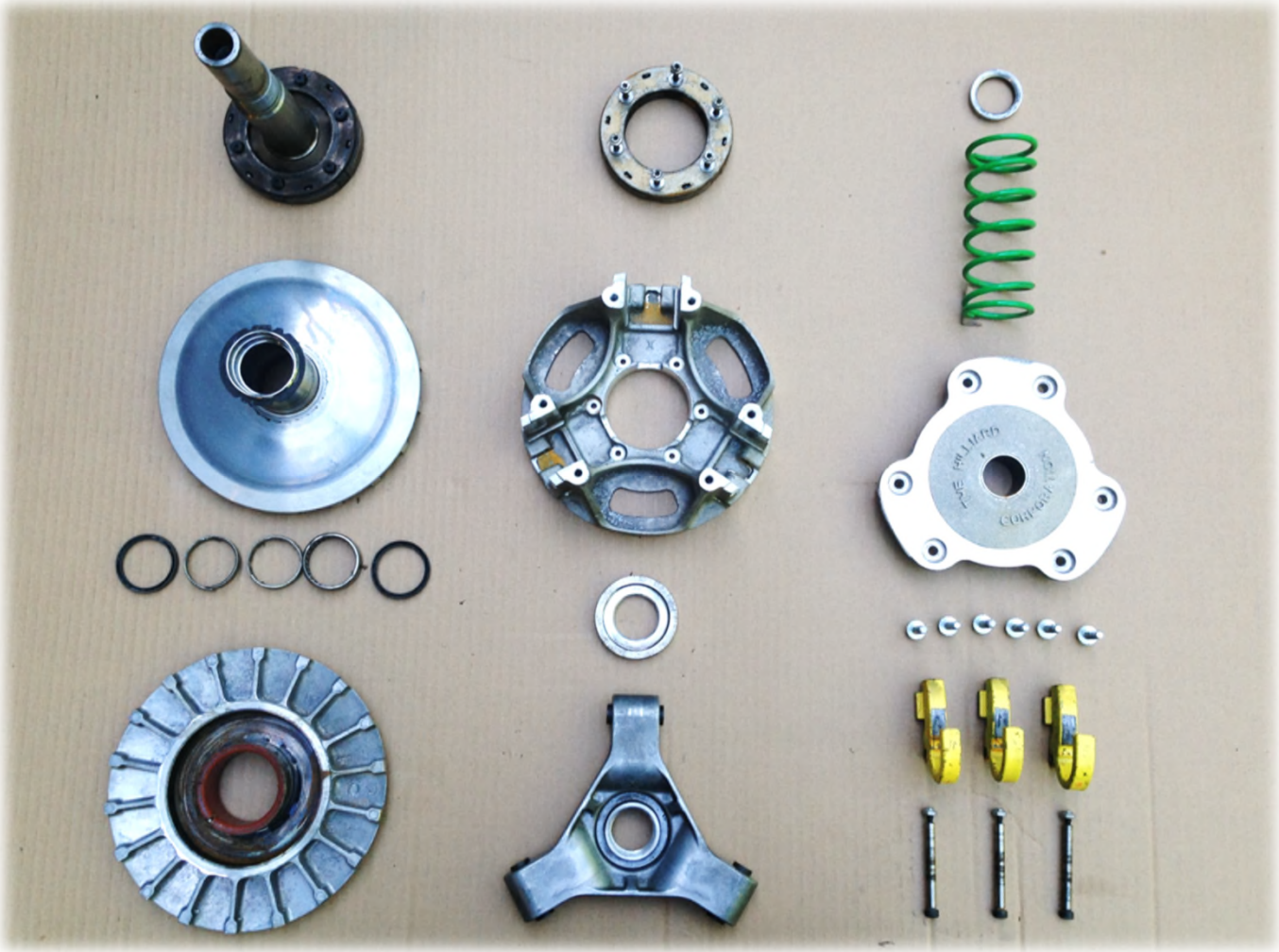
When replacing the thrust washer use MQ kit 23398

Kit Includes:

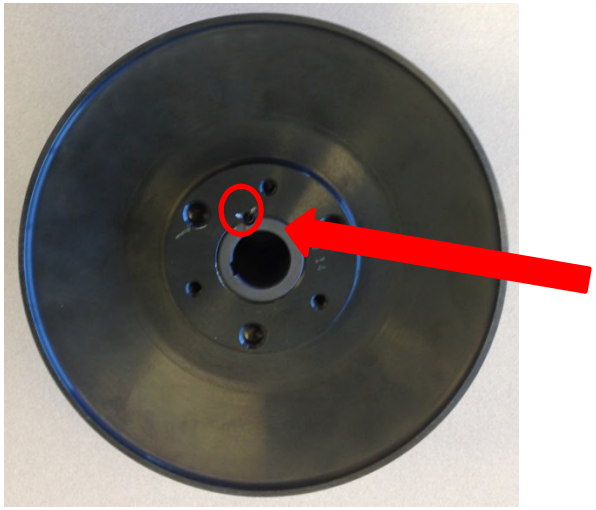
- 2 - Retainer Plates
- 6 - Upper Screws
- 6 - Lower Screws
- 6 - #8 Nuts
- 6 - #8 Locknuts



Parts Layout



Secondary Clutch



Lock Pin

Secondary Clutch

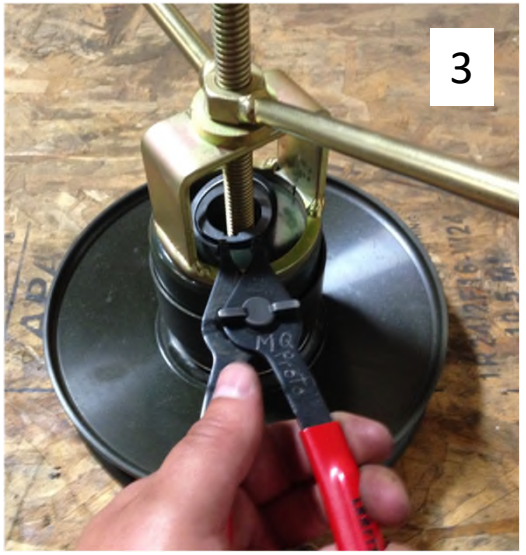
Bushing Kit - 23390

Spring Kit - 23385

Secondary Clutch	P/N
Service Tool – Driven	23391
Bushing Kit- 3 steel balls, DU Bushing, snap ring.	23390
Spring	23385

Secondary Clutch

Disassembly Tool, Part# 23391



1. Insert threaded tool through lower pulley.
2. Slide cage over threaded tool, position the cage so that there is access to the external snap-ring.
3. Install flat washer and thread on wing nut handle until you have fully compressed the spring. You will notice that the snap ring is free if you have compressed spring fully. Use a set of external snap-ring pliers with 90 deg tip to remove snap-ring from pulley

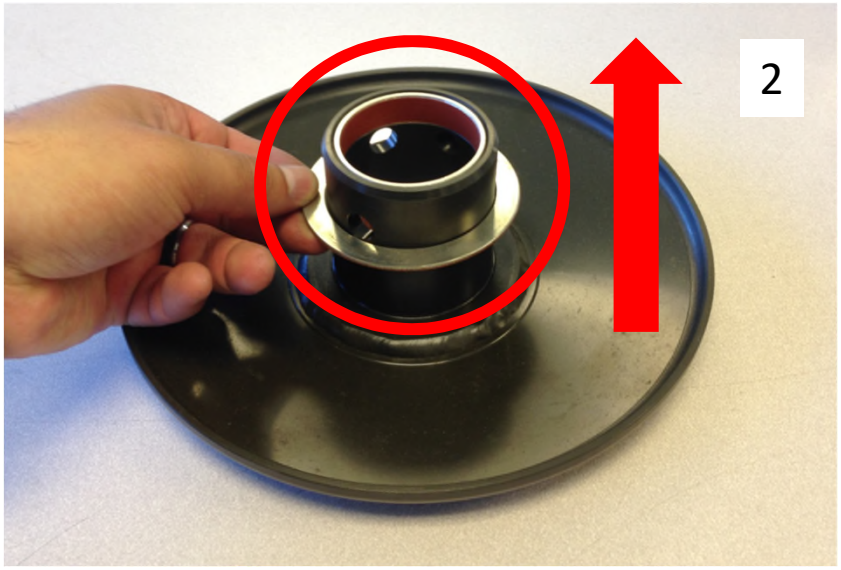
Secondary Clutch

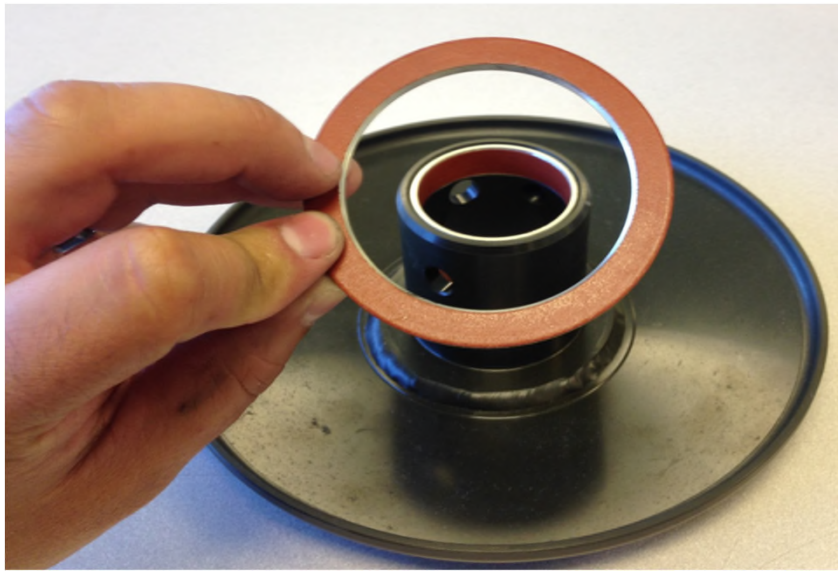
1. With the spring compressed and the snap ring removed, the spring housing cap, spring and base can be removed.

2. Next remove the upper part of the spring housing

3. Remove the spring

Secondary Clutch





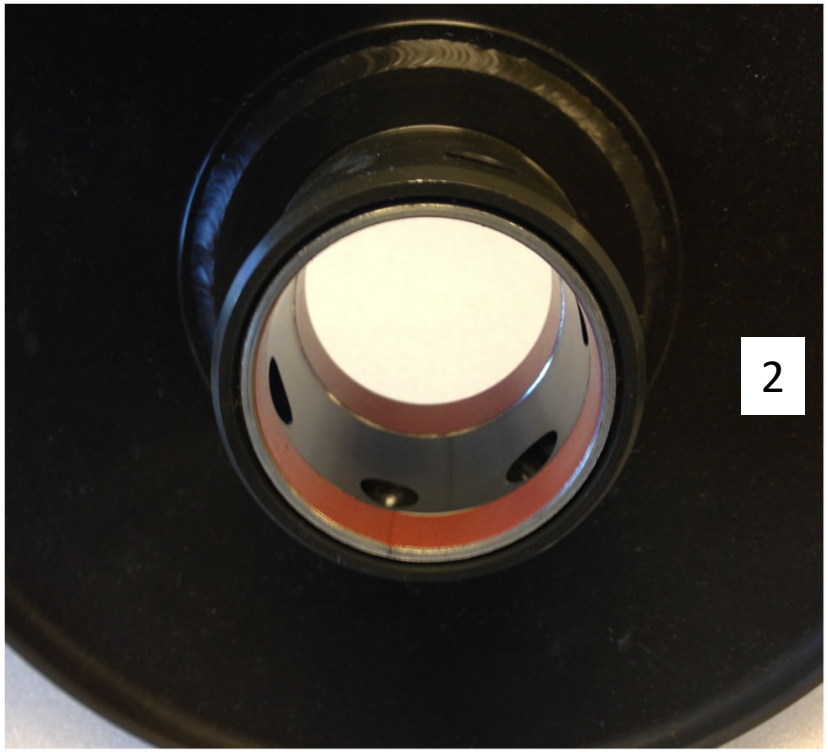
1. The lower part of the spring housing can be removed.
2. Next, the washer .

Note: The metal surface is assembled up, material side should be facing towards the pulley.

Secondary Clutch

1. After the washer, spring housings and spring are removal you now can slide the moveable sheave up off the helical cut groove.

Note: There are three small balls that you will need to secure when separating the two halves.

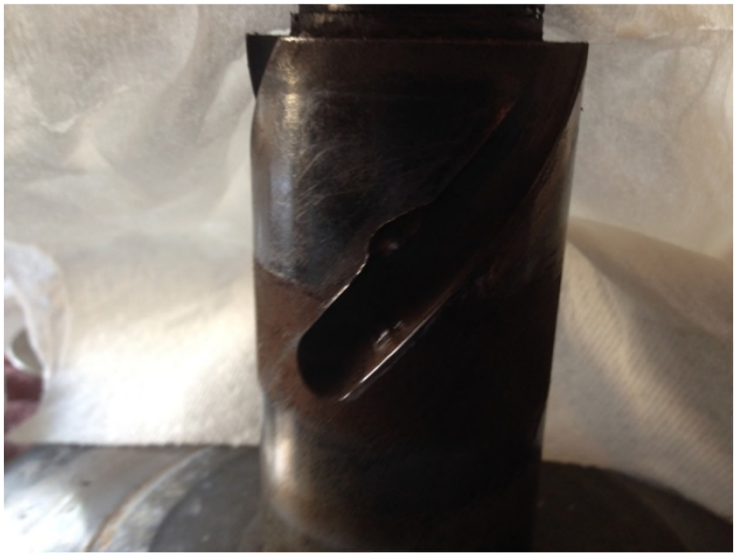


2. Note: Inside the pulley there are two wear sleeves / bushings to clean and/or replace.

* PTFE reduces friction, wear and energy consumption of machinery

Bushing & Ball Kit - 23390

Inspect Helical Groove for Wear/Damage



Shaft portion of the lower pulley.

Inspect and clean as needed.

Carefully use a chisel or flat punch to remove or bushings.

Wire brush clean and remove any wear burrs with file or grinding stone.

MultiClutch Rebuild Presentation Completed

True or False

1. A long bar can be used in between the primary clutches spider to hold it from rotating.

2. The HHNG5 primary clutch can be improved by installing the white clutch weights?

3. Regular preventive maintenance of the clutch system includes blowing out dust and contaminants and ensuring the moveable sheave can fully open and close tight.

4. Proper idle and high speed is crucial to achieve good clutch and belt life.

5. Older HHN Series trowels using the Comet clutch can be upgraded to the MultiClutch system.