FRONT FORK ASSEMBLY

BRENDAN O'HARA

JAKE SAWTELLE

FORK ASSEMBLY

Major parts of note:

- Fork Tubes
- Springs
- Triple Tree
- Upper / Lower Nacelle

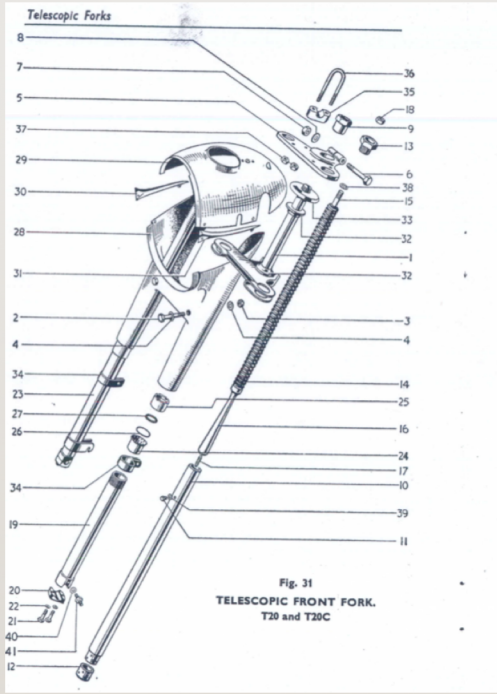
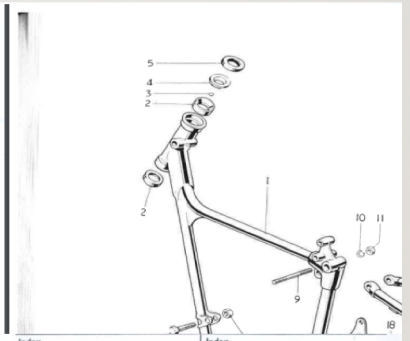


Fig. 31
TELESCOPIC FRONT FORK.
T20 and T20C

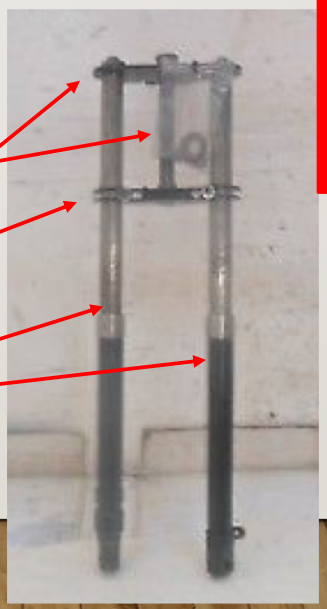


Index No.	Description.	Index No.	Description.
1	Lug, middle and stem.	21	Bolt, spindle cap.
2	Bolt, middle lug pinch.	22	Washer.
3	Nut.	23	Member, outer c/w cap, R.H.
4	Washer.	24	Bush, fork top.
5	Lug, top.	25	Nut, dust excluder sleeve.
6	Bolt, top lug pinch.	26	Washer, sleeve nut.
7	Nut.	27	Oil seal, rubber.
8	Washer.	28	Nacelle, bottom unit.
9	Sleeve nut, fork stem.	29	Nacelle, top unit.
10	Stanchion.	30	Flash, R.H. chrome.
11	Plug, oil filler.	31	Flash, L.H. chrome.
12	Bush, stanchion bottom.	32	Cone, steering race.
13	Nut, stanchion to lug.	33	Cover, dust.
14	Spring.	34	Clip, mudguard to fork.
15	Stud, spring top.	35	Support, handlebar.
16	Rod, restrictor.	36	"U" bolt, handlebar.
17	Stud, restrictor rod.	37	Nut.
18	Nut, top stud.	38	Washer, spring top stud.
19	Member, outer c/w cap, L.H.	39	Washer, fibre.
20	Cap, spindle fixing.	40	Washer, fibre.
		41	Stud, oil drain.

TRIPLE TREE

The triple tree consists of upper and lower components that provide two solid **clamping points** that keep the **fork tubes** parallel while also connecting them to the frame using **15 greased ball bearings**, which allow the fork assembly to pivot from side to side, and therefore steer the motorcycle.

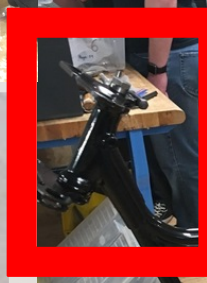
Ball Bearings



Triple Tree

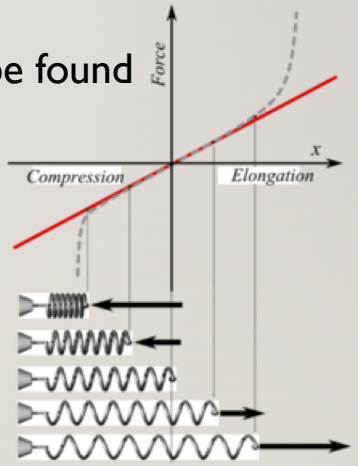
Clamping Points

Fork Tubes

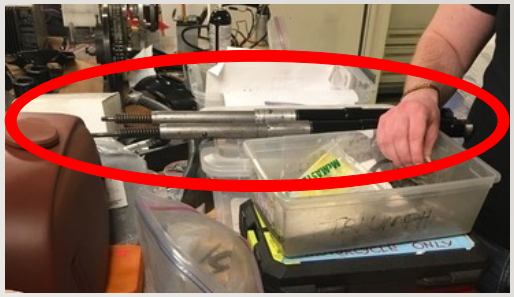


SPRINGS

- The front suspension depends on the long springs inside the fork tubes to maintain a somewhat smooth ride over bumpy terrain. The springs compress to absorb shock from the riding surface.
- This amount of compression is determined from "spring constant" which can be found from Hooke's Law (F = kX)
  - F is the force applied to the springs
  - k represents the spring constant
  - x represents the spring's displacement



RESTORATION



- Disassembled Fork Tubes
- Cleaned and Polished Components
- Located / Fabricated Missing Parts
- Reassembled
- Forking Killed it