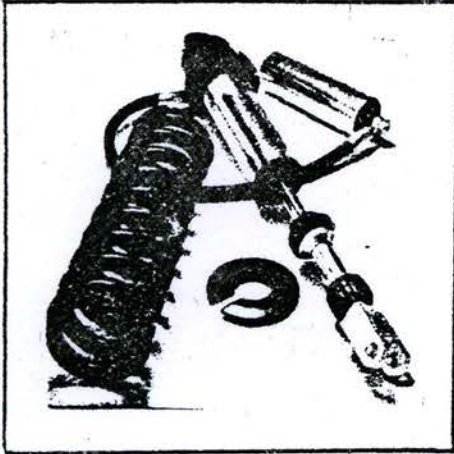


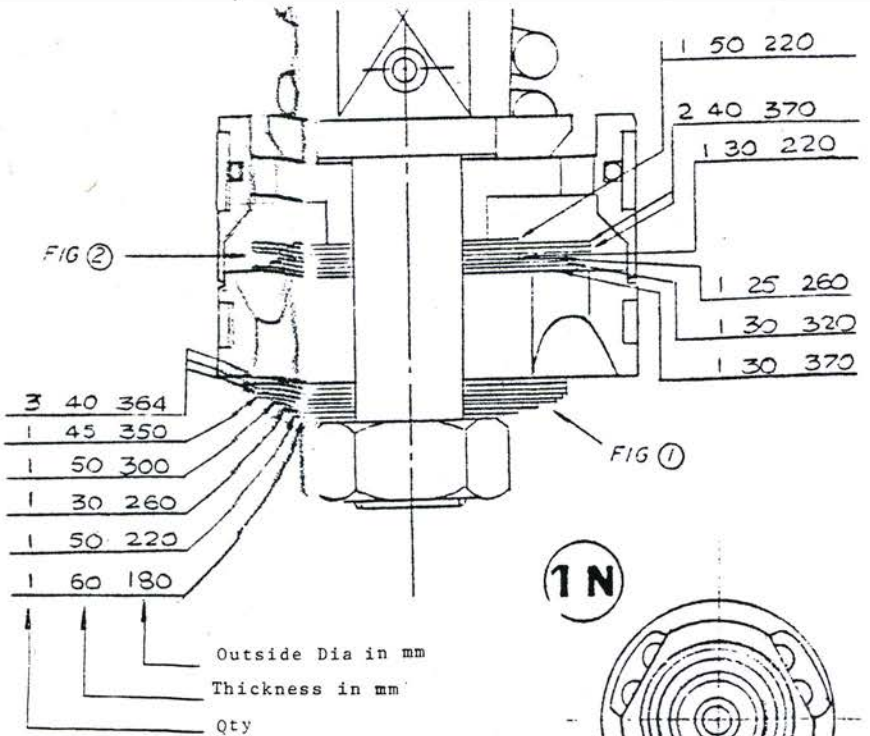
MAICO**1982 alpha 1****Corte & Cosso
Manual****I. Description and Technical Data**

Shock length	:	474mm (18.66 inches)
Spring free length	:	255mm (10.03")
Spring set length	:	235mm (9.25") maximum
Spring rate	:	12.4 kp
Optionals	:	11 kp and 12.4 kp
Gas pressure	:	218 psi to 225 psi
Gas type	:	Nitrogen gas
Oil	:	Maico - Belray shock oil Part No. 82208
Oil Specifications	:	Viscosity Index 123.4 ssu @ 110°F 51 ssu @ 210°F 300 and pour point of - 80°F

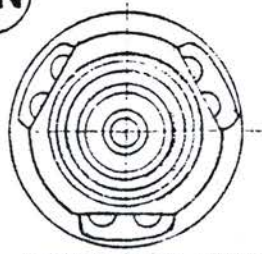
II. Description and Function

Alpha 1 Corte Cosso shocks are specially designed for the Alpha control suspension. Corte Cosso shocks are designed with multiple adjustments and the compression and rebound damping can be adjusted to suite the riders and the track conditions. The adjustment can be made without removing the shock absorber. Pressurized nitrogen gas with high quality shock oil will provide a long life of the shock absorber. Heim joint mounts and low friction seals provide shock with a free floating function and it can operate to a proper function.





1N



Rebound valve setting

Beginning with the following frame numbers, the new compression valve shims 1N has been installed.

- 250 Alpha 353 0821
- 490 Alpha 354 0917

III. Dismantling the Shock

1. Place the shock in the vice carefully.
2. Loosen the lock nut and adjusting nut and remove the retainer carefully.
3. Unscrew the dust cap on the shock body.
4. Discharge the nitrogen from the reservoir.
5. Remove the hose.
6. Drain the oil from the reservoir and damper unit. (Oil can be changed without removing the hose or the reservoir).
7. Press the reservoir cap and remove the circlip and floating piston (floating piston can be removed by pushing a rod through the reservoir hole).
8. Push the guide cap down and remove the circlip and out the shaft assembly carefully

IV. Valve System

There are two different valve systems and two sets of shims are used. Rebound damping valves - outside the piston. Fig ①
 Compression damping valves - inside the piston. Fig ②
 Valve settings are shown in the enclosed sketch. The rebound adjustment would not change the compression damping. To achieve this operation, a spring loaded ball is installed in the taper valve which by passes the oil during the compression stroke. Installing the valve the shims should be placed in order (See sketch Fig ③) and the rebound shims should be installed as shown in the picture.



MAICO



→ Turn this way for more rebound damping

← Turn this way for less rebound damping

V. CAUTION: Reservoir is pressurized with nitrogen gas.
DO NOT discharge the nitrogen pressure without safe guards.
Depressurize nitrogen gas before any type of internal work or
removal of the reservoir work is done.

VI. Spring Preload and Rebound Damping

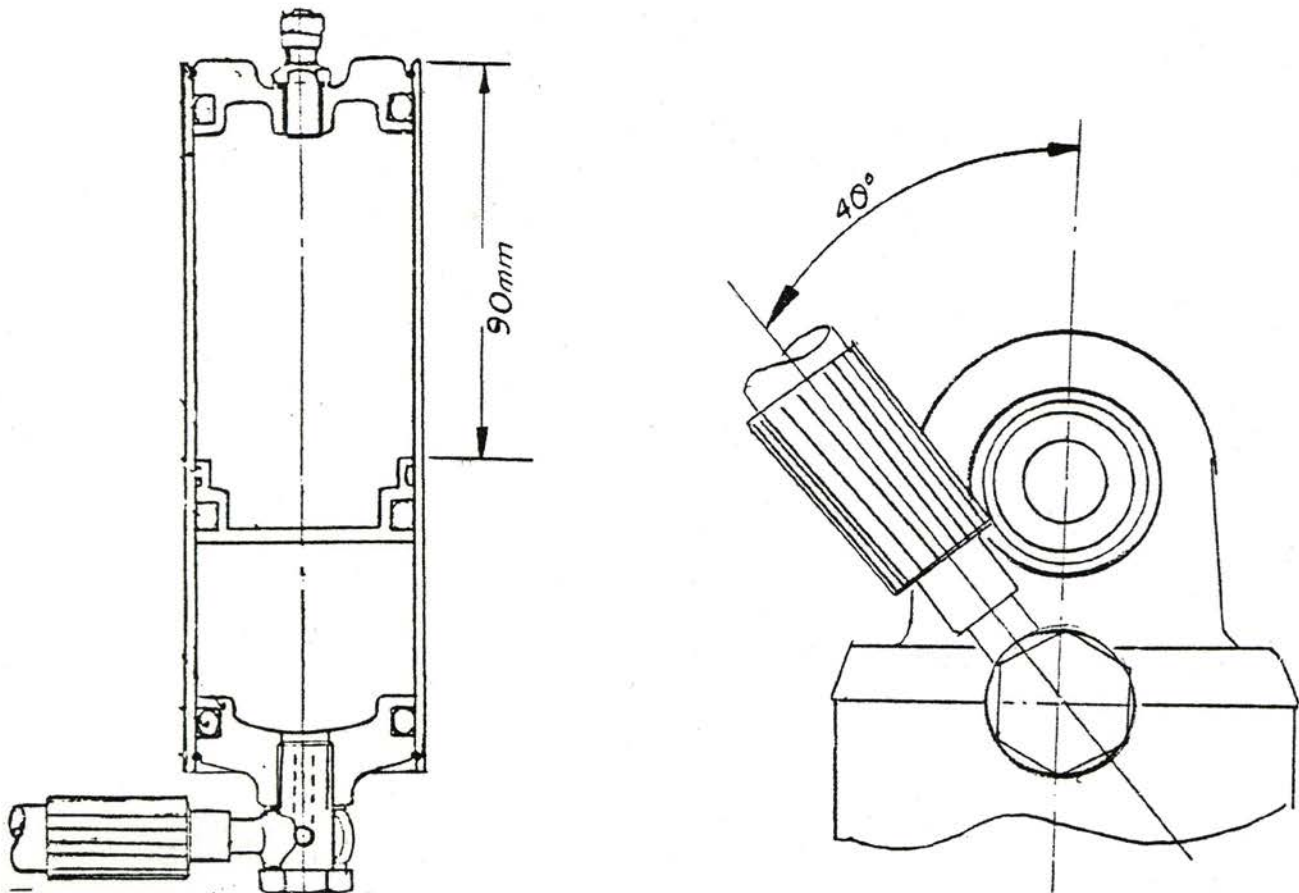
Spring can be preloaded to maximum of 235mm 9.25". (Spring free length 255mm (10.3")). Spring preload can be adjusted by loosening the jam nut and tightening the lock nut.

Rebound damping can be adjusted by the knob which is located at the bottom of the shock.

DO NOT over tighten the knob.

By turning the knob right turn motion (clockwise) is more rebound damping, turning the knob left turn motion (counter clockwise) is less rebound damping.





VII. Inspection

1. Check the teflon piston ring for wear.
2. Check the o rings and oil seal for wear.

Reassembly

NOTE: Rebound damping adjustment knob should be turned all the way out (less rebound position). Insert a small wire through the damping rod to push the valve.

If you remove the hose for rebuilding install the hose about 40° position before you assemble the shock.

1. Use specified oil and pour the oil in the reservoir (reservoir should be lower than the shock eye).
2. After filling the oil insert the floating piston and push it carefully all the way in.
3. Now the oil will appear in the shock body.
4. Fill the shock body with oil up to the circlip groove.
5. Push the piston and rod assembly carefully in to body.
6. Push the guide cap and install the circlip.
- * This position the floating piston will come up to about 90mm, from the top of the reservoir.
7. Insert the dust cap, reservoir cap and circlips.
8. Pressurize the shock with nitrogen gas.

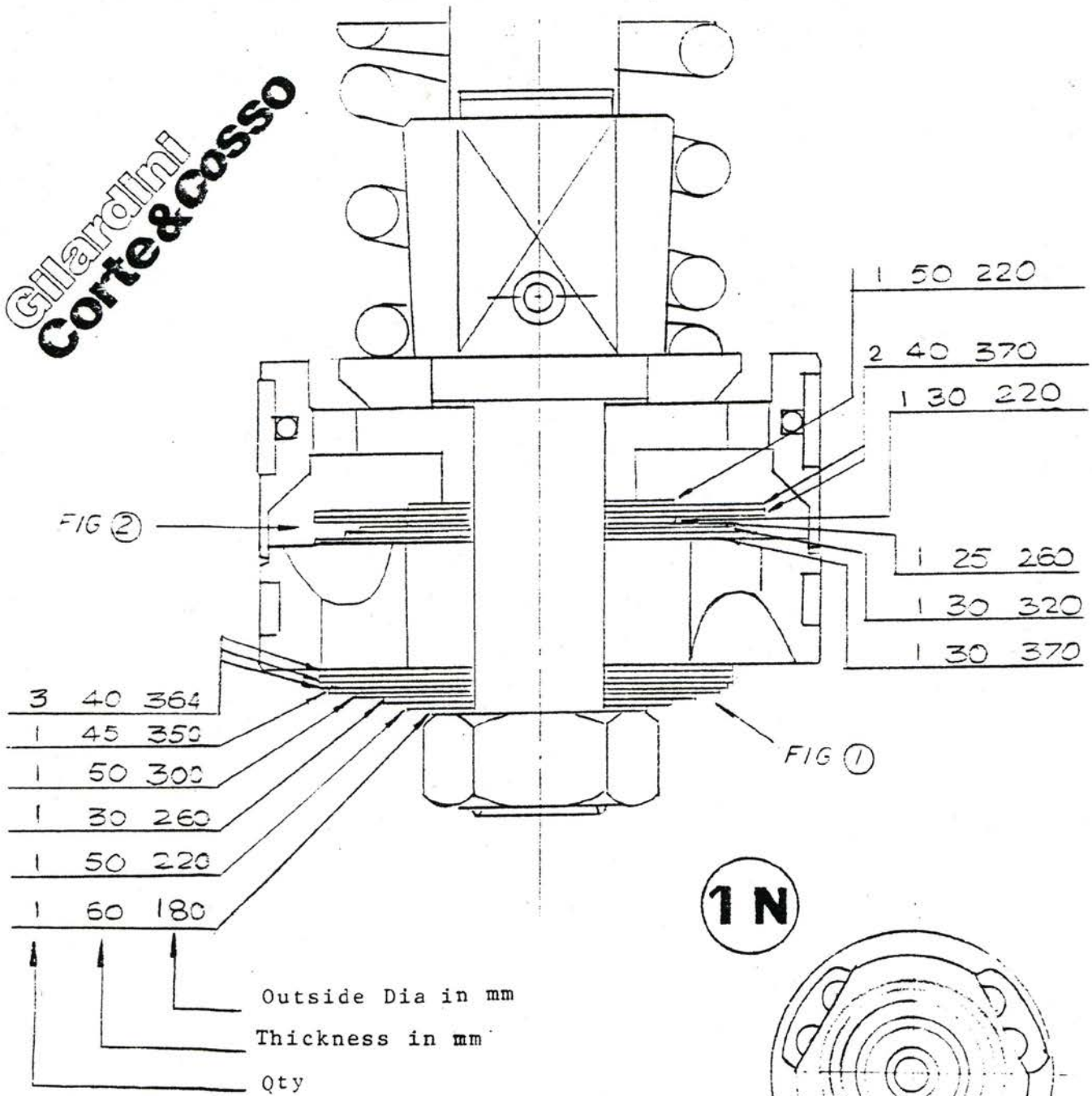
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 Technical Service Dept. USA



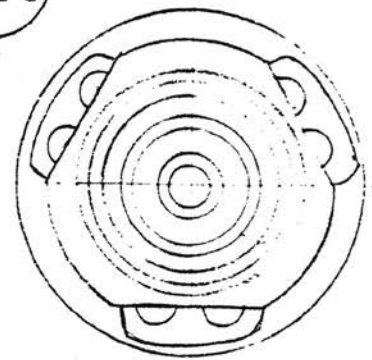
MAICO SERVICE BULLETIN

No. 6/82

Gilardini
Corte & Cosso



1N



Rebound valve setting

Beginning with the following frame numbers, the new compression valve shims 1N has been installed.

- 250 Alpha 353 0821
- 490 Alpha 354 0917

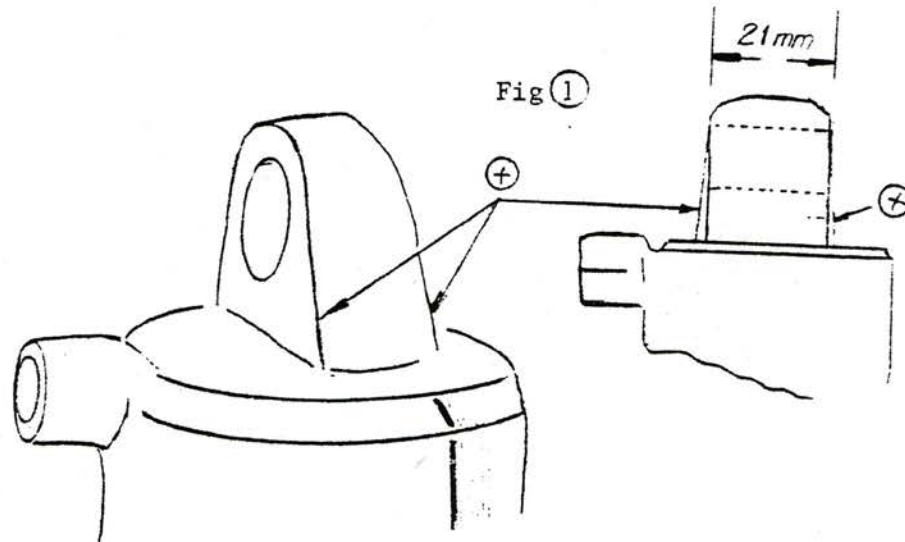
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Date 2-19-82
Technical Service Dept. USA



MAICO SERVICE BULLETIN

NO: 3-82

RE: ALPHA 1 CORTE & COSSO SHOCK



Top Mount Fig 1

The shock top mount should be filed so that the heim joint can move freely. Fig 1.

File to 21mm evenly on the (X) marked area's. Damping force will be effected if the shock mounts are too tight or in a bind.

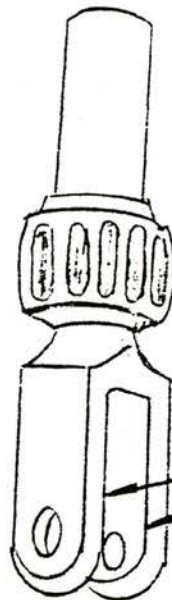
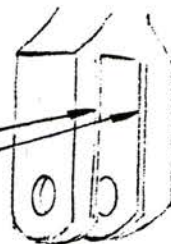


Fig. (2)



Bottom Yoke Fig 2

Yoke should be radiused (Fig. 2) to eliminate the bind when shock is operating.

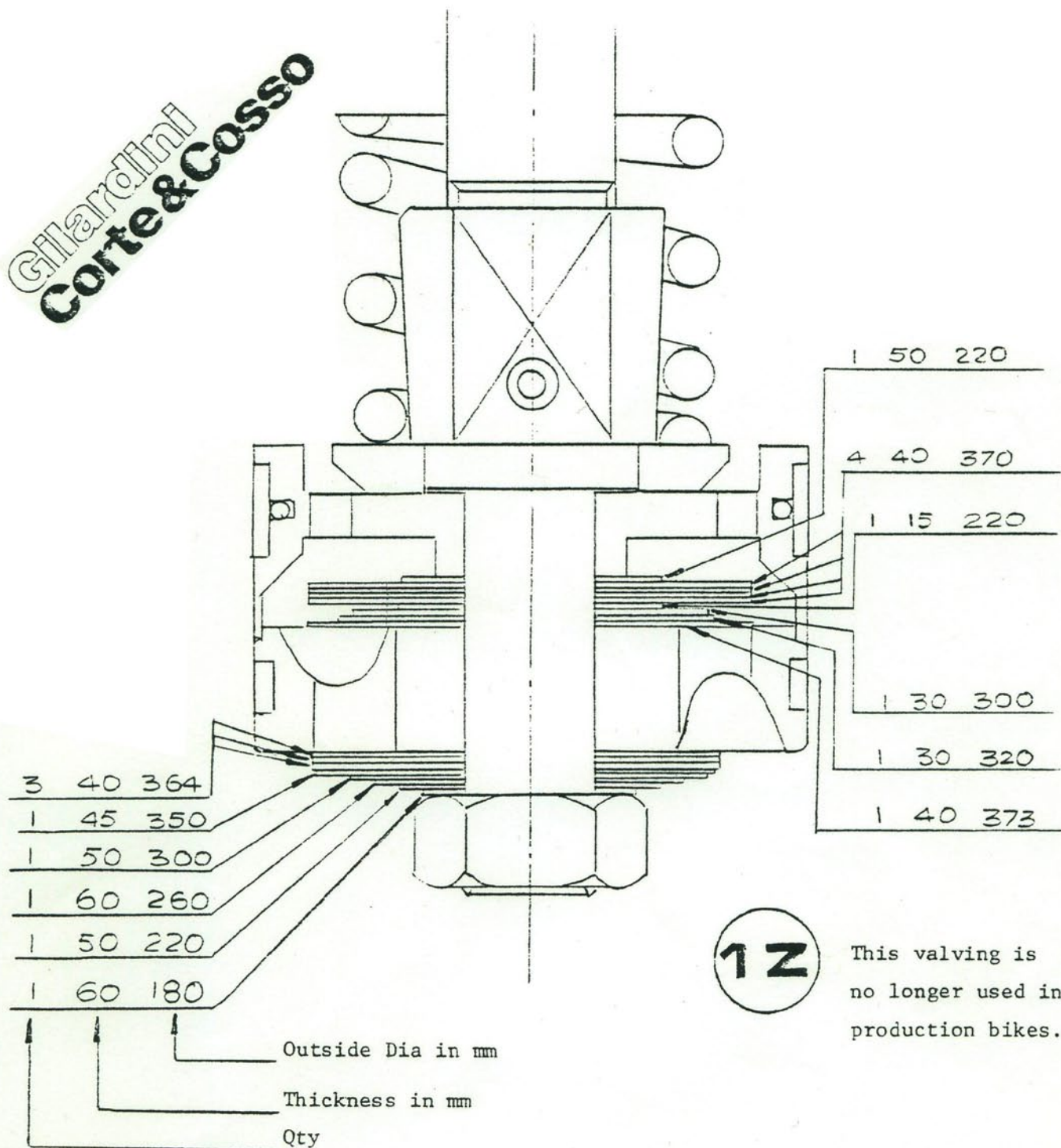


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Date: 2-17-82
Technical Service Dept. USA

MAICO SERVICE BULLETIN

No. 5/82

Gilardini
Corte & Cosso



1Z

This valving is no longer used in production bikes.

Up to the following frame numbers, the 1 Z compression valve shims has been installed.

250 Alpha 353 0821

490 Alpha 354 0917

TD; SN 2-19-82

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