

SEVEN SPEEDS AND ONLY ONE NEUTRAL?

TEST: HERCULES 175

World's Ultimate Sachs Tranny Fix

Ah, the Sachs. Remember? Sachs, DKW, Hercules, whatever one was supposed to call it at any particular time, it was for all the world a wonderful little 125cc motorcycle. (Or 100cc, if one so desired).

While most of us at DR never actually got around to owning one of the puppies, most of use here did at one time possess a bike with a Sachs powerplant. And what a powerplant it was. More available horsepower







than you might dream possible in a 125. The engine that powered the infamous Killer Deek to a string of road racing victories that still has men shaking their heads in disbelief. The engine that propelled more motorcycles to ISDT gold than any other brand. The 125 that took overall wins in eastern mud runs and western desert races alike. A truly astounding piece of machinery.

But it always shifted funny. You never heard of a Sachs engine truly breaking a transmission but you did hear them hit a lot of unwanted neutrals. Too many, the risk of a missed shift every now and then was worth the extra horsepower and stone reliability that came with it. Ask Tom or Cordis Brooks. Or Dane Leimbach. Or Tom or Jeff or Jack Penton. Or Billy Uhl. Even Marty Smith successfully raced a Sachs engined Monark before his marriage to Honda. It was a tough little engine.

We say *was* because that particular model of the Sachs engine is no longer in production, even in the DKW chassis. The Sachs engine is available but it's not a *Sachs*. The chassis is now the Hercules, not DKW. Hercules is sending several representatives to the ISDT this year, spearheaded by Billy Uhl, late of Can-Am, late of Penton. Billy has been piloting the new generation Sachs mill throughout the Two Day qualifying series all year long, with great results aside from some minor teething problems that are not unexpected in a bike as completely new as the Hercules. The 125, 175 and 250 Hercs have put together an impressive string of wins in their first year of campaigning the U.S. qualifiers. It looks as though the folks at Hercules have been paying attention to their competition, (spelled Penton) for the last year or two and have come up with the first real threat to Penton (especially in the small bore classes) in the off road market in a long time. Maybe Penton's first threat ever.

Probably the first thing one notices upon encountering any of the Hercs is the pleasing appearance of the machine. The Hercules motorcycles are definitely striking at first glance, somewhat in the tradition of the Penton line, but their beauty goes deeper than just good looks. Perhaps it's partly the attention to detail that catches the eye. Or maybe the look of stark functionality, much like Maico motocrossers, strikes a responsive chord in the viewer. Whatever the reason, the Hercules captures your attention and refuses to let go until you've made a point of looking the bike over completely, in great detail.

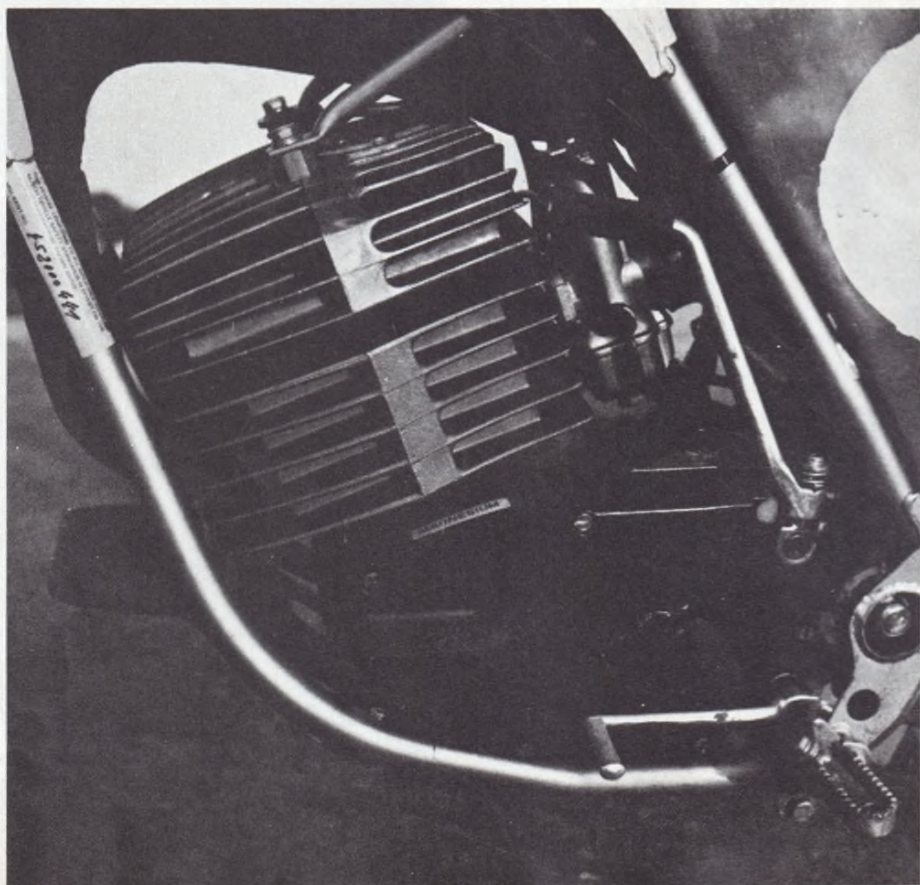


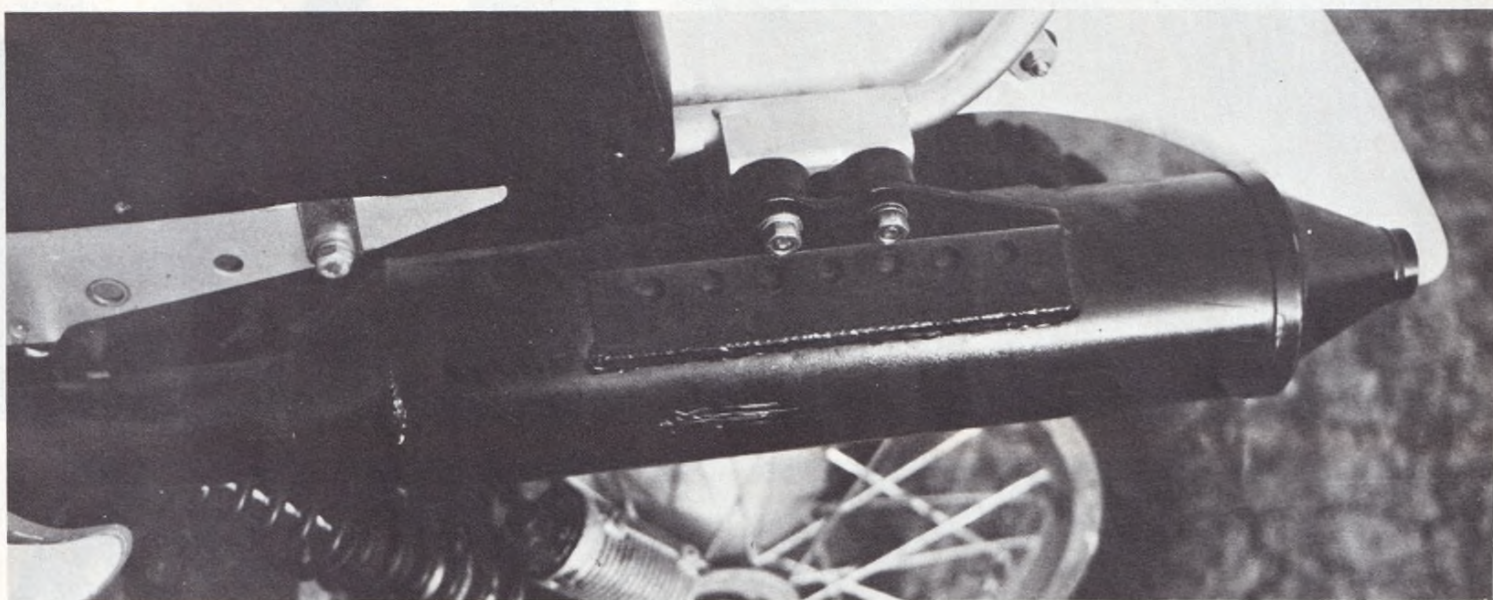
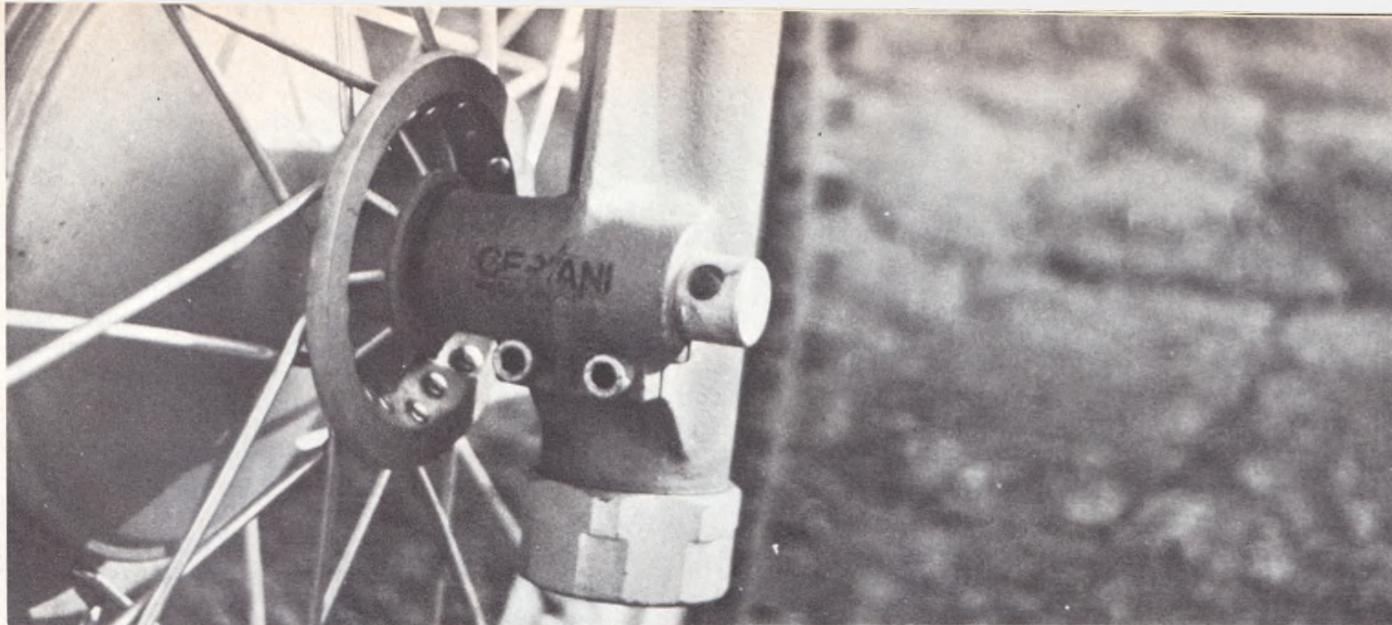


As you walk around the machine, you notice little things like rubber plugs over the swingarm pivots (they conceal tapered roller bearings). Like the huge silencer and the well thought out pipe mounting system. Like the little rubber pad glued on the crossbar to protect the VDO housing. The magura controls, Metzeler tires, grey chromoly frame, on and on. The eye is delighted as it darts around in and out of the shadows and curves of the orange bike.

One feature of the Hercules that keeps drawing the eye back is the big, black and grey engine. It says Sachs on the cases all right but it just doesn't look like one. The fins of the cylinder and head have that familiar massive look of the old Sachs but they have a certain swoop to them that would look right at home on a Romulan Starship. Not exactly a flashy looking cylinder, but definitely unique.

If you look closely under that cylinder, you'll notice something missing. The seam down the center cases. The new generation Sachs





splits horizontally, a blessing when it comes time to strip it down. It's a pleasure to disassemble the new Sachs, as the engine almost falls apart in your hands. Not falls *apart*, but *falls* apart. Once you remove the case bolts on the bottom and pull the Motoplat, the cases open like a well packed suitcase.

Inside the suitcase you find a transmission that looks nothing like the Sachs of old; the gears are healthy looking (although the old ones didn't break, remember?) and once you start looking, you'll notice that they add up to (count 'em) seven speeds. Whew! Seven speeds should get the 175 Hercules to a terminal velocity of about 85 mph. We once asked Uhl what the top speed on his 175 Herc was and he didn't know. Seems he never got tapped out in seventh. Can't say that we blame him. Anything over 70 is a pretty healthy clip on a trail bike, even an open class machine.

Inside the cylinder are a few more novelties. The porting is . . . er, unorthodox. It would appear that the

Germans have learned to computer-size their porting arrangements. However they arrived at the configuration, it works. Not a super high revving ass-kicker, this little 175. Instead it offers ample torque down low and plenty of smooth acceleration on top. Oh, it is a 175, make no mistake about that, and as such it retains that certain ledge in the power band that is common to most competition engines of this size. The unusual porting system serves to make the climb up to and away from that ledge smoother than most any 175 we've ridden. The power surge, while every bit as strong, is much more tractable than that of the 175 Pentons.

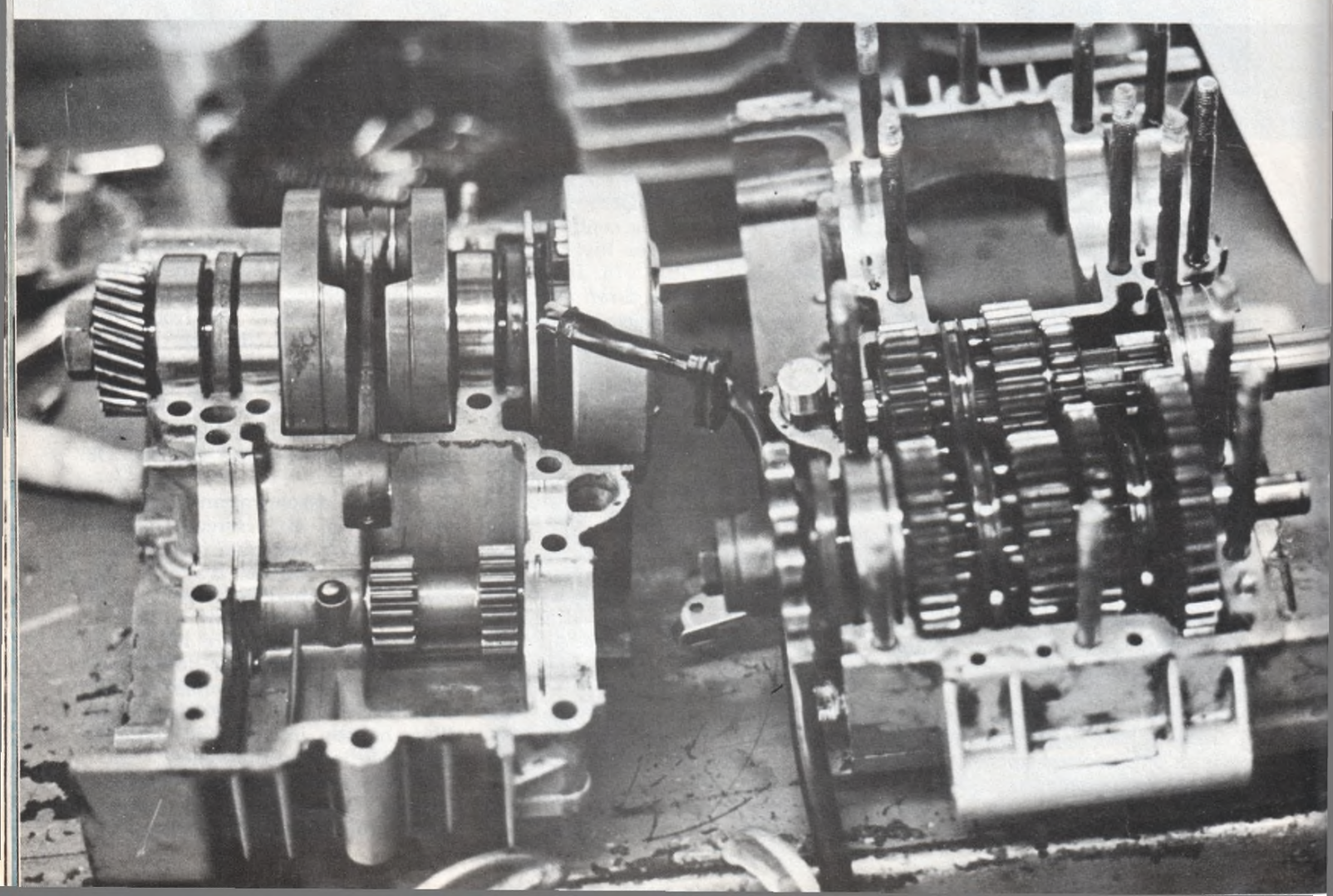
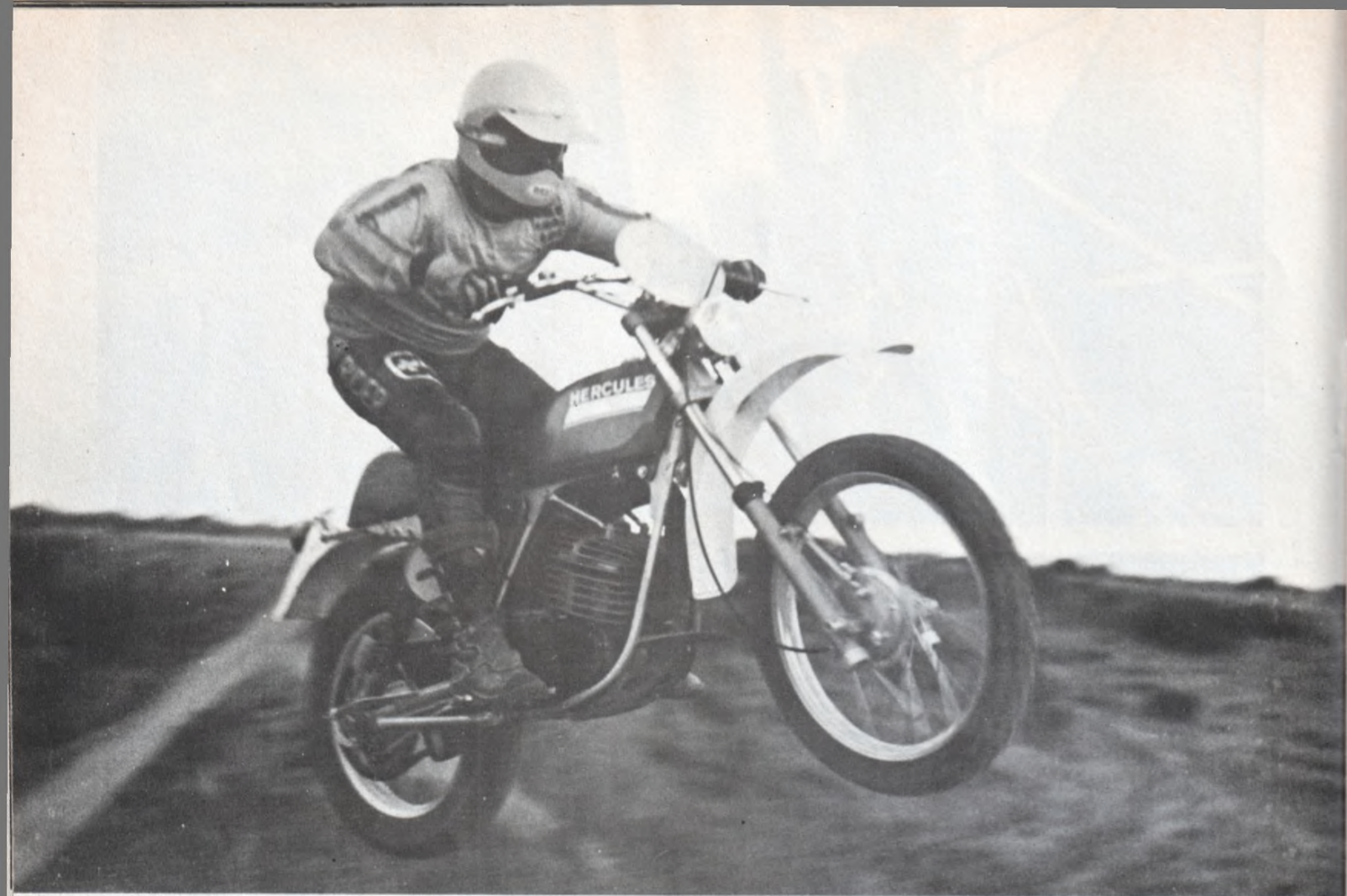
Come to think of it, while we were riding the 175 Hercules, we had to keep reminding ourselves that we weren't riding a new generation Penton/KTM. KTM has a whole new 175 motor in the works that may be out by the time you read this test. It's just possible that KTM decided to come up with a new design in response to the competition provided by the Hercules. Speculation per-

haps, but it will be interesting to see what kind of 175 KTM comes up with.

When we said that riding the Hercules is a lot like riding the KTM, we were referring to the handling as well as the power. Up front, the Herc is fitted with the new leading axle magnesium slider Cerianis. Marzocchi #3s out back. The suspension, weight, center of gravity and overall feel of the Hercules are very similar to that of the Penton. Or KTM.

For some reason we can't quite put our finger on, the Hercules almost seems like it's more fun to ride than the Penton. Maybe it's just the novelty of a brand new seven speed Sachs that you can shift without a clutch. Maybe the Herc handles a little better. We openly admit that when it comes to comparing two machines of such superlative handling, nobody in this office is good enough to tell the difference.

As it stands now, our resident Penton/KTM freak is seriously thinking of purchasing a Herc. (The



fact that he is also a Sachs engine freak may have something to do with it. Read DR Recommends, Nov. 76).

Each of the test riders missed one shift. Maybe just for old time's sake, maybe due to the shift lever being set too low.

We would trade the Marzocchis for something a little nicer. The Marzocchis are an excellent shock, but everyone has his own preference. Ours comes with blue springs.

Everything on the handlebars is Magura, which is good, except the grips which are bad. Personal preference again.

There're about a million shock positions, one fork position, which is excellent.

Comes equipped with a center-stand.

Four threaded holes on top of the alloy tank eliminate the need for straps on your tool bag.

Not a high breather frame, like the Penton, or even Monark, but a pretty good airbox just the same.

Seat and controls are comfy for most folks.

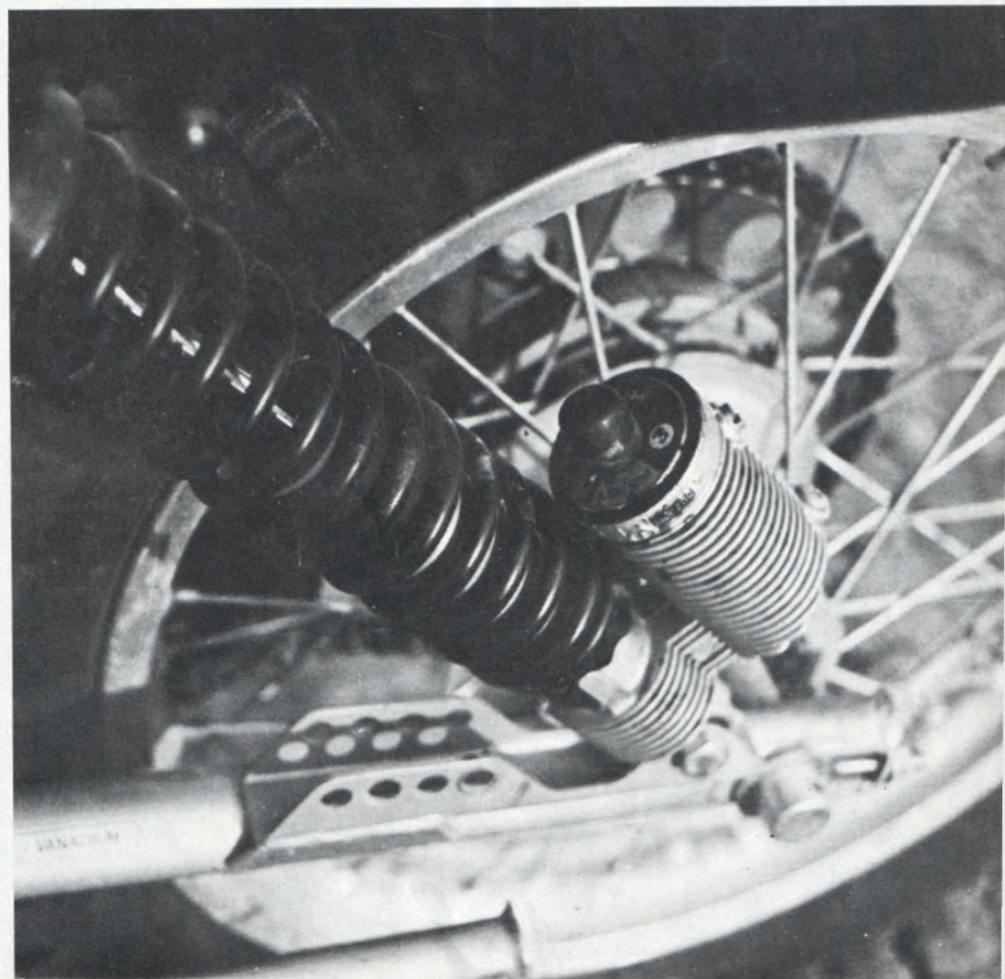
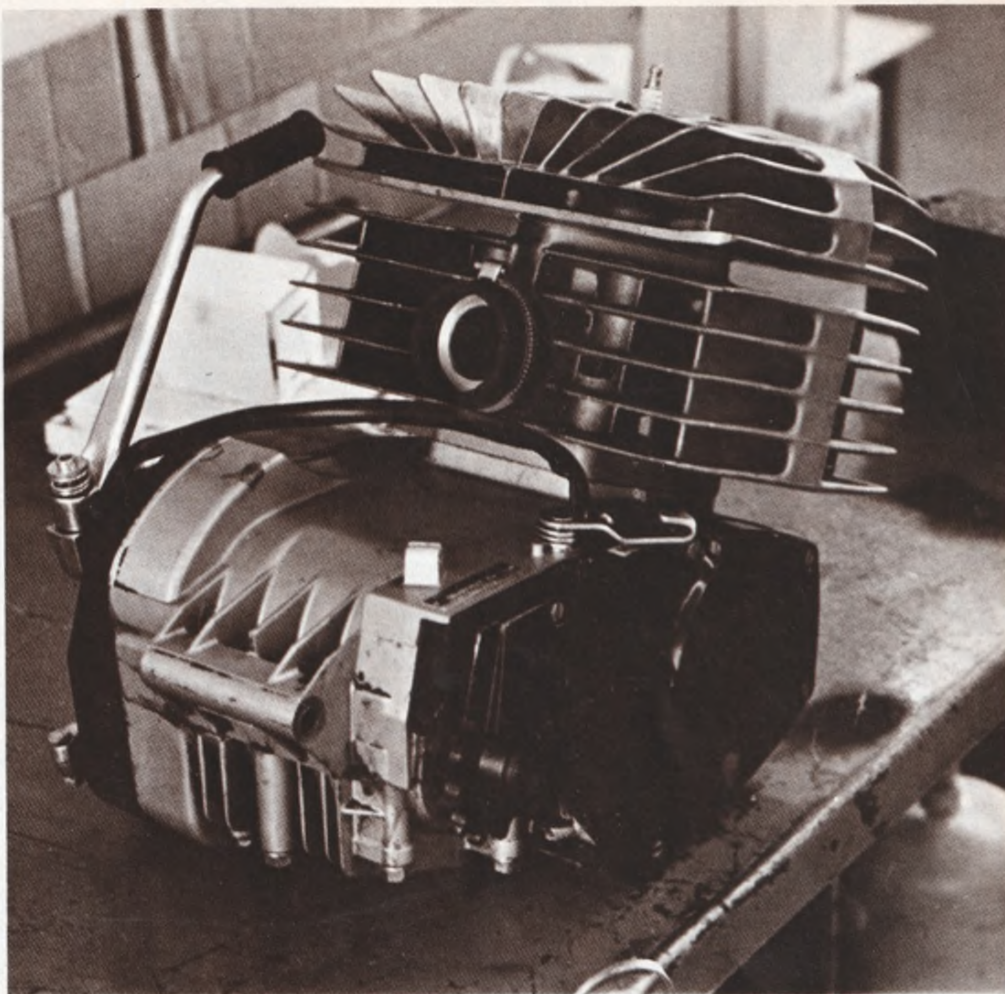
The brakes, both of them, have a super good feel and stop the Herc with no nonsense.

The Hercules turned out to be a terrific slider. Even over roughest potholes and marbley surfaces, the bike never once acted like it wanted to get silly. Very business like.

The piston is totally flat on top due to the head having only half a combustion chamber. This makes the engine highly resistant to detonation. Clever.

Overall, the 175 Hercules is truly an outstanding enduro/Two Day bike that inspires confidence in most anyone who throws a leg over it. None of us could find a single thing to complain about on this machine, surely a breakthrough. This may well be the perfect trailbike. That is, if the 175 Penton is not. ●

Frame (type)	Chromoly
Overall length	N.A.
Wheelbase	55.5 in.
Ground clearance	10 in.
Seat height	35 in.
Overall width	N.A.
Steering head angle	N.A.
Wheels/Rims:	
Front	Akront, green label
Rear	Akront, green label
Tire Sizes:	
Front	3.00x21 Met
Rear	4.00x18
Suspension:	
Front	Ceriani, magnesium suder, leading axle
Fork travel	225
Rear	200
Fender material	Plastic (Falk)
Color(s)	Orange
Warranty, if any	None
Where made	West Germany



DIRT RIDER



**TRAIL
RIDING
STORIES**
**NATIONAL
ENDUROS**
**WARM
CLOTHES**
**HOW TO
FIX ITS**

VOLUME 4, NUMBER 12 DECEMBER 1976 PDC \$1.25

TESTS:
175
HERCULES
400
YAMAHA
YZC



DIRT RIDER

Vol. 4, No. 12

December 1976



COVER: Unidentified soul captures the charm of the dirt rider at the finish line of this year's Burr Oak Enduro. Photo by Brian Palormo.

ED SCHNEPF/Publisher
RICK SIEMAN/Editorial Dictator
CHET CARMAN/Dictatorial Editor
MARK KIEL/Assistant Editor
DICK MANN/Legend
BRIAN FABRE/Free Advice
DAVID SWIFT/Ringo Springs?
CARL CRANKE/Wherever

DENIS SNOW/
Western Advertising Director
7950 Deering Avenue
Canoga Park, California 91304
(213) 887-0550
LEE SALBERG/
Eastern Advertising Director
333 N. Michigan Avenue
Chicago, Illinois 60611
(312) 263-4569
HANK UHSMANN/Advertising
Coordinator

BOB RATNER/Production Director
JOHN ERNSDORF/Executive Art Director
JOHN HERNANDEZ/Art Director
RICH GEHRUNG/Graphics Director
SVEN CARLSON/Circulation Director
JIM BUCHANAN/Circulation Services
DAN WHEDON/Promotion Director
CAROL VAN ORSDOL/Business Manager
JANET GRAHAM/Consumer Relations

Tests

- 26 **175 HERCULES**
*Cure Your Old Sachs Shifting Problems;
Trade It For A New Sachs*
- 38 **400 YAMAHA YZ C**
Best Guest Test Yet

Things

- 25 **PRODUCT EVALUATION: HATCH GLOVES**
Blister Preventative
- 52 **DIRT RIDER XMAS GRIM WEATHER CLOTHING GUIDE**
Button Up Your Belstaff

Features

- 18 **PHOENIX, THE HARD WAY**
350 Miles At Less Than 24 MPH
- 34 **WET RIDER**
More Pretty Pictures From Us To You
- 57 **THE THRILL OF AGONY**
The Victory of Defeat

Technicalities

- 16 **PROJECT ECO-BIKE**
Say Goodbye
- 36 **SWINGARM CARE**
What And When
- 50 **PROJECT YELLOW PERIL**
Such Is Life

Happenings

- 44 **MICHIGAN NATIONAL ENDURO**
By Ann and Brian Palormo
- 47 **PENNSYLVANIA NATIONAL ENDURO**
By Rik Paul

Departments

- 4 **GETTING PUMPED**
Farewell Speech
- 6 **MAIL**
A Mixed Bag
- 9 **FABRE**
The Usual Good Advice
- 11 **DAS BITCHEN**
Guest Columnist
- 12 **EQUIPOPHILE**
Goodies
- 14 **DR RECOMMENDS**
This And That
- 24 **BFD**
Gossip
- 66 **MOTOGRAF**
A Cheap Shot

DIRT RIDER is published monthly by Challenge Publications, Inc., 7950 Deering Avenue, Canoga Park, California 91304. Copyright ©1976 by Challenge Publications, Inc. All rights reserved on entire contents; nothing may be reprinted, in whole or in part, without written permission of the publisher. Publisher assumes no responsibility for unsolicited material. All photos, artwork, and manuscripts must be accompanied by stamped self-addressed return envelope. Subscription orders and changes of address should be sent to DIRT RIDER, Circulation Dept., 7950 Deering Ave., Canoga Park, CA 91304. Allow at least 60 days for first copy of new subscription to be mailed, or for change of address. Include old address, as well as new, and address label from recent issue, if possible. Single copy \$1.25. Subscription rates: one year subscription rate for U.S. \$11.25; all other countries add \$1.50. Second class postage paid at Canoga Park, California and at additional mailing offices. Printed in U.S.A.