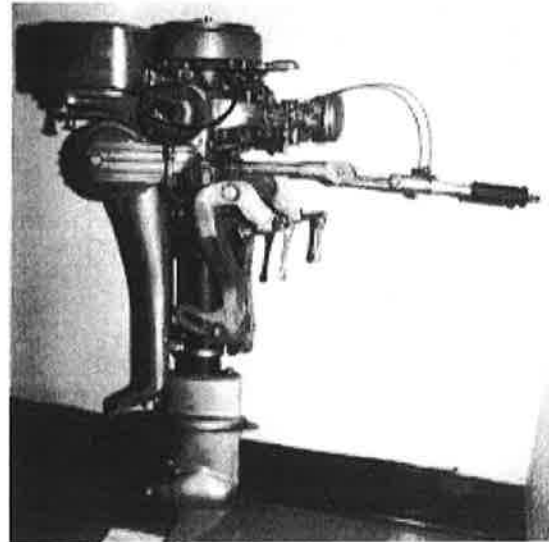


Neptune Master '16'

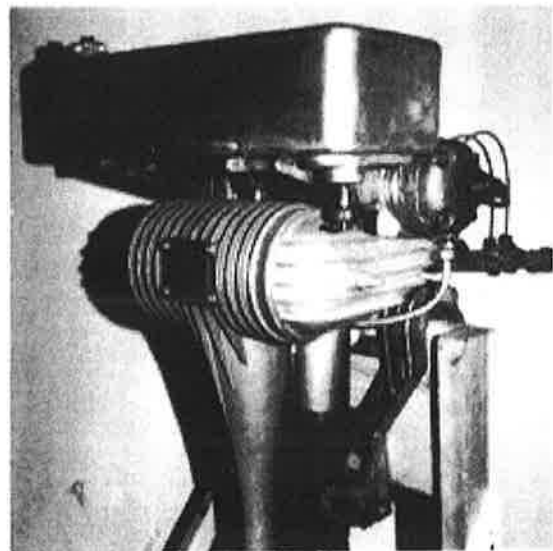
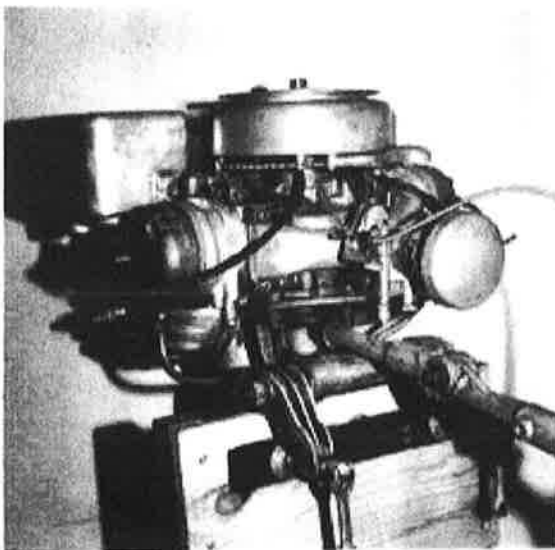
by James L. Smith

"Top of the line in 'thirty-nine", the Neptune Model 16A39 shown in the accompanying pictures was foremost in a field of seven Neptune motors available in that year. They ranged in size from the diminutive 1.2 H.P. Junior Single through 2, 4, 5, 6, and 9 H.P. models but the '16' commands attention from the first glance.

A powerful 20 cubic inch opposed twin, it weighs in at 95 pounds and is claimed in the specs to attain a surprising maximum of 4850 RPM under favorable conditions. This is achieved through the use of ball bearings on the crankshaft, roller bearings on the connecting rods and needle bearings on the driveshaft. The friction reducing system, however, is not followed up in the gearcase where only bronze bushings are used. The motor utilizes the two cycle, three port system and has nickle iron cylinders with detachable high compression heads. The bore of the cylinders is 2 1/2 inches and the stroke of the piston is 2 inches. The power head is definitely set up for high speed operation and 16 H.P. is claimed at 4000 RPM. The rods are drop-forged steel and the lightweight aluminum alloy pistons have two rings apiece.



Effective cooling is accomplished by means of a circular positive centrifugal pump located at the top of the gearcase and keyed off the pinion shaft. An extra large air cooled muffler with rear cut-out plate is fitted and the propeller is a bronze three blade 10" x 10". In common with many of the other Neptunes this motor features a stationary power head and mounting bracket. The remainder, including the driveshaft housing and lower unit, rotates with the tiller bar. This gives the operator a secure position while roping over a large motor.



The Master '16' made its first appearance as early as 1931 and was continued for over a decade with the last model being marketed in 1941. In the model designation the suffix 'A' was used for the Neptune, 'B' for the Muncie and no suffix for the branded-out Motorgo model which appeared in at least one year - 1934. This meant that during the 11 year period the motor may have been sold bearing any of the names Neptune, Muncie or Motorgo. All of the motors were rope start and the sample motor is equipped with a magneto made by the Wico Electric Company of Springfield, Massachusetts.

This engine was acquired only recently and in spite of its age it is in practically mint condition. The two gallon tank is polished and has no decal of any type; although, the Neptune identification with model and serial number appears permanently on the starting pulley. The mag plate has a wide range of advance and retard positions and is conveniently steadied with a ratchet device to reduce slippage. The model WS47B Tillotson carb is secured to an exterior manifold intake pipe, which in turn is bolted directly to the cylinders in the manner of the early large Evinrude twins. There is a handy motorcycle type twist grip throttle on the steering handle with a Bowden wire connector to the carb. A small accessory coil spring assists in returning the throttle to slow speed.

Master '16's appear to be scarce. It was unfortunate that the engine was produced during the last years of the Depression and may have been turned out in limited numbers relative to the smaller sizes. Prospective buyers of the motor class may have turned to such popular makes as Johnson, Evinrude or Elto since the price tag was \$180.95 - a sizeable sum during the thirties. It would be most interesting to know the total number of them made. I would be glad to hear from any members having a Master '16' or knowing of one and in this way some sort of index of scarcity could be established.

The following article entitled "AUCTIONEER'S GAVEL to SOUND END for PLANT" appeared in The Muncie Star, Monday, May 14, 1973. It was written by Wiley W. Spurgeon Jr., grandson of Dr. Wm. A. Spurgeon, a former president of the Muncie Gear Works. Mr. Spurgeon, who was an officer of Muncie Gear during its transitional period in 1969, is presently editor of The Muncie Star and it is through his kindness and co-operation that we receive this information.

"A 65 year-long chapter in the industrial history of Muncie is scheduled to end Thursday, to the accompaniment of an auctioneer's gavel.

Beginning at 10:00 A.M., the remaining assets of the former Muncie Gear Works Inc. will be sold at a public auction at the old Muncie Gear plant, 700 E. Wysor St.

The final hammer of the gavel will signal the end of a firm whose products included everything from military hardware to deep freezes, whose engineers developed such items as an early mini-bike (never marketed but prototype built in 1946), and whose lawyers successfully defended patent litigation brought against the firm in the 1930's by another outboard motor manufacturer, and in the landmark case voided some of that company's patents.

The Muncie Gear building and its contents were acquired earlier this year by the Park Corp., a West Virginia firm. That is the corporation which arranged Thursday's sale.

The name of Muncie Gear Works dates to 1910, when a corporation

by that name was formed to take over a two-year-old company with the fascinating name of Muncie High Wheel Auto Parts Co.

The High Wheel firm was one of many which sprouted up throughout the nation and especially in the industrial Midwest - in the infant days of the automobile industry. It supplied components to some of the many, equally small manufacturers of horseless carriages. The impact of the automobile on the economy of Indiana itself can be judged from the fact that perhaps as many as 100 differently named automobiles were manufactured in the state at such places as Albany, Muncie, New Castly and Union City in addition to Indianapolis, Kokomo and South Bend.

Romantic name notwithstanding, The Muncie High Wheel Auto Parts Co. did not last long. In 1910 the Muncie Gear Works was organized with a capitalization of \$250,000, a sizeable sum in those pre-federal-income tax days. Its first president was H.L. Warner and he was succeeded by T.W. Warner. Both are men whose names are perpetuated in the automotive industry by way of the Warner Gear Division of Borg-Warner Corp. and Warner Machine Products, a subsidiary of Essex International.

Within a few years in the teens, Muncie Gear Works was busily turning out clutches and transmissions for the automotive market, and as the Warner's other business interests demanded more of their time they were succeeded in the Muncie Gear president's chair by Dr. William A. Spurgeon, a Muncie physician then in his late 50's who subsequently retired from the active practice of medicine to become a manufacturer.

By the early 1920's, Kenneth A. Spurgeon, son of the president, was operating the company as its general manager and he subsequently became its president, a post he held until his death in 1967.

The automotive parts business was beginning to change in the 1920's but Muncie Gear transmissions continued to be widely sold, with customers including International Trucks and the Ford Motor Company, which used the Muncie product in its Model T trucks. A Mid 1920's historical account reports that Muncie Gear at that time employed 150 people.

For the first 25 or so years of its varied corporate existences, Muncie Gear occupied a facility of about 25,000 square feet facing Vine Street, which extended just west of the Chesapeake and Ohio Railroad passenger station.

Stock in the thriving company was sold to the public in the 1920's and control was acquired by Chicago interests. Diminishment of the auto parts market in the late 1920's followed by the 1929 stock market crash and the depression which followed led to a reorganization in which control was again gained by Dr. W.A. Spurgeon. He in turn, eventually sold his interest to his sons Kenneth, William Chase and Wiley William. The latter two were executives of the firm at the time of their deaths in 1948 and 1954.

The firm having seen its automotive parts market disappear, and reorganized under the name of Muncie Gear Works Inc., embarked on a program of manufacturing that has few parallels in Muncie history, with employment ranging from highs of 700 during World

War II, the early 1950's, and even as recent as 1969, to lows of less than 50 in the late 1950's.

Among products developed, experimented with and manufactured in varying amounts by Muncie Gear between the 1930's and its demise were:

- A full line of outboard motors using from time to time, the brand names of "Neptune", "Skipper", "Mighty Mite", and "Muncie" as well as outboards manufactured for such distributors as Sears Roebuck and Co. and Montgomery Ward.
- Transmissions for potato diggers.
- Automatic coal stokers which were distributed world-wide under the brand name "Master", as well as sold to such wholesalers as the Crane Co.
- One of the first commercially-successful heat pumps, a device in which heat is taken from the ground and used to heat buildings in the winter, and where through use of a reverse process buildings are cooled in the summer.
- As an offshoot of the heat pumps a full line of air conditioners for residential and commercial use.
- One of the first commercial deep freeze units, only a few of which were manufactured because of the onset of World War II.
- Power lawn mowers.
- Parts for the ill-fated Muncie Gyroplane.

During World War II, the Muncie Gear plant was the first to convert locally into defense products and in the years 1940-45, it turned out 37-millimeter gun carriages, aircraft parts, and outboard drive for barges and landing craft that eventually led to the development of the inboard-outboard stern drive that is popular with today's boaters, and rocket components. To do this, it expanded into the old Aladdin Lamp plant at 18th and Hackley and The Republic Steel plant at 20th and Monroe.

The firm barely had time to crank up the stoker, outboard and heat pump production after World War II when the Korean conflict forced the outboard motors into a back seat position and rocket motors became the prime product of the Muncie plant. Stoker production was phased out because of the diminishing market. (Fewer buildings were being heated by coal). Outboard production was cut back, moved to a plant on East Willard Street which subsequently burned, and then moved to Cordele, Georgia in 1956. The heat pump and air conditioner business was first moved to a plant at 18th and Hackley Streets and then also relocated in Georgia.

Muncie Gears last period of big employment and production came in the last half of the 1960's when local employment jumped from about 25 (mainly turning out Muncie 18 parts) to some 300 - all of whom were building rocket parts for the Department of the Army for use in Southeast Asia.

The Georgia operation involving outboards and air conditions grew at a steady pace and was employing some 50 people by mid-1969.

It was announced in June, 1969 that all of the stock in Muncie Gear Works Inc. had been purchased by Applied Devices Corp., College Point, New York.

Although W.A. Spurgeon (son of Kenneth A. Spurgeon) and Wiley -29-

Spurgeon Jr. remained with Muncie Gear during a transitional period, the New York firm took over active management soon after. The outboard motor business was moved back to Muncie in 1970 but was never made operational here, and in 1972 it was sold to E. Ray Adams, a former Muncie Gear employee who now is manufacturing "Mighty Mite" outboards at a Florida site.

Applied also moved the air conditioner facility from Cordele to Atlanta in 1971 and soon after that sold it to a group of Cordele businessmen headed by Silas Brown, a former Ridgeville man who had managed the Cordele plant for Muncie Gear. That group moved it back to Cordele where it remains in business.

When Army contracts for rocket parts were not renewed in early 1972 Applied Devices shut the Muncie plant down except for a small caretaker force and the 100,000 square feet facility has been idle since then.

According to advertisements for the auction sale, the building itself which was first enlarged to some 65,000 square feet in the mid 1930's, with the advent of the stoker business, and then expanded to cover most all of the rest of the available land in the area in 1940, will not be offered for sale Thursday. Park, the present owner, has not indicated its plans for the structure which it purchased less than five months ago".

Mr. E. Ray Abrams had been chief engineer with the former company and after acquiring the Outboard Division, he called it Termar Inc. and located it at Lehigh Acres, Florida. During the summer of 1974, Mr. Abrams disposed of the outboard concern to Mr. W. J. Hathai of the Emery Advertising Corp. with head office at Towson, Maryland. Mr. Abrams consented to stay on as an employee for five years but has recently quit the company. The plant continues to operate at Lehigh Acres and produces the familiar "Mighty Mite".

POPULAR MECHANICS ADVERTISING SECTION

March 1937



R. H. F.
FAMOUS
SINGLES

\$
49.50
UP

From the NEPTUNE Single at \$49.50 to the 16 H. P. "Master Twin" at \$149.50 - you simply can't buy more power, speed and downright dependability for equal money!

The new NEPTUNE line was the sensation of the Boat Shows - and these motors will be the sensation of every body of water they churn up this coming season. By all means - see them before you buy!

Exclusive Features!

- All Neptunes have...
- New type mechanical supports
- Automatic fuel tank cut-off
- Novel metal struts
- Universal exhaust
- Carburetor controls in steering handle

WRITE FOR CATALOG
MUNCIE GEAR WORKS
DEPT PM MUNCIE INDIANA



By J. L. Smith