

the



**Jet Thrust**  
news



## Supercharged Champs

the JET THRUST news  
Don Curtis, Editor  
RR 1  
Colo, IA 50056

**DOUBLE ISSUE**

FIRST CLASS MAIL

**JT Down Under**

*AL KURZENHAUSER*



**Summer 1995**

the JET THRUST news

SUMMER 1995 - ISSUE TWO

The JTN is intended to provide a link among owners and enthusiasts of the high performance Studebakers (Larks & Hawks) built in 1963 and 1964. We seek not only information about surviving cars but also parts which exist from "Parted" units. Please be sure we have all the data of which you are aware. Feel free to make as many copies of this notice as you need to give to others who may be interested. The continued existence of JTN depends on the support of the readers, your contributions both financial and material will help insure its survival.

EDITOR, TYPIST, WRITER & ROSTER KEEPER.....Don Curtis  
RR1, Colo, IA 50056 Ph 515-377-2745  
I welcome phone calls but can't always take notes;  
detailed requests are best handled by mail.

FEATURE WRITER, RESEARCH, TYPIST & ASSIST EDITOR.....George Krem  
1248 Esther Ct., Iowa City, IA 52240

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4560 Walton Creek, Cincinnati, OH 45243

\* \* \* \* \*

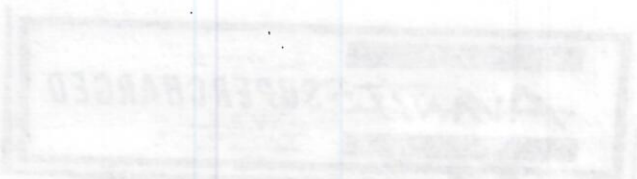
ROSTERS May be ordered for \$5. The five groups currently total 17 pages and will be shipped flat in an envelope. Any two lists will be shipped folded for \$3. The groups:  
63 Hawks - 63 Larks - 64 Hawks - 64 Larks - Engines

1964 JT PRODUCTION LIST Is available for \$8, lists all JT's built in 1964 with a few details - not production orders.

Send orders to Don Curtis

\* \* \* \* \*

JT ROSTER INFORMATION Send to Don Curtis, RR1, Colo, Ia 50056  
Serial or VIN # (driver's door post)\_\_\_\_\_ Body Style\_\_\_\_\_  
Engine # (top of block-driver's side-stamped)\_\_\_\_\_R1 or R2\_\_\_\_\_  
Type of transmission\_\_\_\_\_ Color, Car\_\_\_\_\_ Interior\_\_\_\_\_  
If 1963, does the car have fender tags?\_\_\_\_\_ Body #\_\_\_\_\_  
Your name, address & phone number. THANKS!



# Issue #2

## JET THRUST NOTES

by Don Curtis

WOW! What have we started? We mailed about 230 copies of the JTN in February. I think the Pony Express has been running an extra horse to Colo since then. Your response to the first issue of JTN has certainly been gratifying. The volume of material and financial support has been sufficient to guarantee at least one more issue after this. I ask that you continue to submit data on cars, surviving engines, available parts, tech tips, interchanges and anything else you would be willing to share.

Our lists or rosters presently have 276 entries. We were able to add many vehicles as a result of the interest issue #1 generated. The breakdown of the lists is as follows:

JT / JTS Engines removed from car	-	23
1963 L A R K S	-	66
1963 G T H A W K S	-	82
1964 L A R K S (Lark body)	-	57
1964 G T H A W K S	-	48

\* \* \* \* \*

### SPECIAL NOTICE

I'm sure most of you are aware that our JT cars have been chosen as one of the types to be "FEATURED" at the International Meet. A corral will be set aside for parking, this will also give the JT "folks" a central meeting spot. John Begian, International Meet Chairman, owns a full pkg 1963 Super Hawk 63V 30484. I hope many of you can take your JT's and support this effort.

My health, although much improved over last year and George's Summer schedule appear to make it impossible for us to attend. We are working on the photo album and will try to have it ready so that Tony Berbig can take it to Dearborn. If you haven't sent

a photo of your pride & joy, please do so soon, don't be left out!

\* \* \* \* \*

### SICK BAY REPORT

Lionel Stone, manufacturer of many Studebaker repo high performance parts is now making progress and is in therapy. He had been in a coma following a bad fall. Let's all direct our thoughts and prayers for his continued progress.

\* \* \* \* \*

### SUPER CHAMP

Cover Car

by Don Curtis

Info from Andy Petrass

I know, last issue I told you we had accounted for nearly all the JT's built. Well, I was ignoring the existence of the Champs. It was known that a quantity (from 1 to ?) had been built as toys for the Paxton crew. Various estimates placed the number at "not over 5". Deciding it was time to uncloak another Stude mystery, I contacted ace Stude sleuth Andy Petrass and asked him to chase this down. "Spare no expense!" I told him. "As long as there is no money involved."

Again thanks to the generosity of Newman & Altman we were able to do a paper chase. The results were small for the task involved. Total production...TWO!

Our cover truck E7 19345 is presently owned by Louis Fenci of Tucson AZ. He wrote:

Enclosed is a photo of my 63 R2 Avanti powered Champ. The production order indicates it was delivered to the Paxton Products Division in Nov, 62, for their evaluation or whatever. While it was in Santa Monica it was used by several celebrities for various promotions.

When Studebaker closed up, a Mr. Jack Ernie Jr, who was a Studebaker Corp South West Zone rep bought the truck and retired to Tucson, AZ.

WE GET LETTERS...

Jack removed the blower and installed air conditioning in its place. Also the rear gears were changed from the 4.55 to 3.73. The truck was used by Jack for the next 20 years. It was then sold to Mr. Roy Harrison, a local car collector, who used it to haul trash.

I purchased the Champ from Roy Harrison in 1991. Since then it has been refinished, the air conditioning has been removed and the blower equipment reinstalled.

L.F.

The other unit Andy found documentation for was a White 1/2 ton long box. E7 19327 was ordered sent to Indianapolis, Ind, Snyder. The prod order is confusing but it appears the correct engine # had to be JTS 1383. Auto trans, TT, 3.73 and 5 - 8.00X15 Firestone 500 Nylon tires rounded out the truck.

Are there more? Possibly. Jon Myer related to Andy that there was an R2 Champ in the LA area years ago which had belonged to a cement company, although well used it appeared to be a factory built job. As with any historical research we are able to check only the evidence remaining. There is always a chance for error or omission.

\* \* \*

CREDIT FOR THIS ISSUE

BOB PALMA	Ray Tanner Motors 1964 Horsepower #'s
JAMES QUIGLEY	JT Down Under
DAVE THIBEAULT	Fuel Filter Discussion
JOHN ROAM	1964 GT Hawk Computer Analysis
GEORGE KREM	Current News Column Horsepower Discussion
ANDY PETRASS	R2 Champ Research

\* \* \*

Miles Walker from Medford Lakes, NJ sent us a copy of "HIGH PERFORMANCE CARS" from May/June 1994. Among the featured cars is Miles' 1964 Super Hawk 64V 1085. This is a well done article and does justice to the car which was originally one of the 1964 Auto Show units.

Earl Benson of Collins, MS wrote to tell of his purchase of an R2 1964 Cruiser which had the doors welded shut for racing! He was unable obtain the serial #, but by checking my notes, I can tell you Earl, the correct # is 64V 9209.

Now, I'm embarrassed because I have to ask those of you who have my 1964 List to add an "S" to the engine # for this car. I never claimed to be perfect...?

George Krem of Iowa City suggests NAPA # F-5451K as a substitute exhaust pipe flange gasket.

Jim Geary of Goldsboro, NC suggests we all obtain, if possible, a "Dupont's Color Sampler" from a Dupont dealer. He says it is very good for matching colors. He reports that # 143 Maroon is very close to 1964 Bordeaux Red.

Frank Ambrogio of Casselberry FL sent us a donation and his good wishes. Frank is the "father" and editor of "56J" which was the first sub-club newsletter. 56J is devoted to the 1956 Golden Hawk. Thank you, Frank.

Gavin Hill of Christchurch, N Zealand writes that he is currently rebuilding 63V 23334. He obtained the remains from Keith Graham of Columbus, OH and is using a donor body from California (the only way to go. Ed). This car is R2, Pow Shft, disc and P steering. It will join 63V 19953 his R1 Custom 4 dr. Gavin is also on the trail of an R1 GT. Good hunting!

Gavin brought up the question concerning "Avanti" tachs and even speedos in early JT "Super" Larks. Yes, this did happen. Later full package Larks had a Tach and 160 speedo to match the regular Lark instruments.

Dan Miller of Auburn, GA and his Cruiser, 63V 4822 have a long history together. Dan writes about his Blue Mist R1: My Cruiser was ordered by "Downtown Studebaker" a local Atlanta dealer. Saw first duty as Service Manager's Demo. It was then sold to a gentleman living less than 2 miles from me. His wife drove it to work...my high school English teacher! I serviced the car for several years in the service station where I worked after school. I lost track of it for several years. It later resurfaced so I had to have it! Now under restoration but still original.

more from George Krem

### THEY'RE STILL OUT THERE!

Malcolm Berry called a few days ago to tell of two 1964 Studebakers he found recently...One GT Hawk and a Daytona hardtop. He was told the Daytona was purchased new by a certain garage owner. The buyer noticed that the dealer also had a "Lark four-door" with a factory R2 engine. He arranged for the dealer to install the new R2 into the new Daytona, and some years later, he decided to install the engine in a 1964 GT Hawk. The job was never completed and both cars have slowly deteriorated side by side for years. By now they are parts cars; Malcolm was not able to get a serial number for either car, but he did get the stamped number from the R2 engine.

Don Bjelke of Santa Rosa CA reports no wheel cover problems when using rims from a Ford Bronco. Ford 13/16 lug nuts are a must when using Ford wheels on a Stude.

Bill Hollman of Woodland, CA purchased his R2 Convertible 63V 35965 in early 1964. He was the first registered owner, at the time of purchase the car was equipped with Dayton tires. He wonders if Daytons could have been original equipment? Prod order calls only for "WHITE SIDEWALLS".

\* \* \*

### MISCELLANEOUS (JET) THRUSTS

by George Krem

Jim Pepper, of Waukesha, WI, has recently visited the Brooks Stevens Museum. He reports that at least three original R2 engines are to be found there. The original prototype of the Excalibur SS (known at first as the Studebaker SS) still has its original R2 Jet Thrust powerplant (engine # JTS-1704). In addition, Stevens' 1964 R2 GT Hawk is on display (engine JTSK-314). And finally, the one-of-a-kind Excalibur Hawk had an R2 (#RS-2386) This car is now receiving further work in the shop of SDC member Art De Armond in Swisher, Iowa. The original R2 engine is on display at Stevens' museum, and Art has been contracted to prepare the car for appearances this summer in several vintage events. Studebaker engine guru Corbin Walters has been asked to build a "new" Stude powerplant for the car. By the way, this car could have been Studebaker's answer to the Cobra; it is a small, light two-seater coupe. Sure wish they would have

We decided to make a detective adventure out of this, and we spent hours looking for a car with engine number JTS-1045. It turned out to be a 1963 Cruiser with flightomatic transmission and 3.07 twin-traction axle! Here was a 130+ mph car! But from new, the engine spent its life in the 1964 hardtop until it got partially installed in a Hawk. We were still curious, so working from only a body number, several more hours of research located the production order for the hardtop. When new, it was built with 289, 4-speed transmission, bucket seats, heavy-duty springs and shocks, twin-traction, and disc brakes, plus the usual comfort items of heater and radio. A very interesting car in its own right.

We also discovered that both the 1963 R2 Cruiser and the 1964 hardtop were originally delivered to the same small town in Ohio.

Malcolm hopes to purchase the R2 engine parts. Good luck, Malcolm!



MO. DAY YR.	MO. DAY YR.	ORDER NO.	4348	74549	63V 23815
BODY NO.	IGN. KEY NUMBER	TRUNK KEY NO.	FINAL ASSY. DATE	ENGINE NUMBER	
	4578	1479	2/20/63	JTS 1524	
DESTINATION	LOS ANGELES 56 CALIF		ZONE CODE	DATE SHIPPED	
			43 Z		
SHIP VIA					SHIPPER NUMBER

MI. NJII WAB ATSF MONTBELO ROBERTSON

DESCRIPTION OF UNIT AND EQUIPMENT

63VF4 3224 REGAL 8 2 DR SEDAN  
 13 P 6311 ERMINE WHITE  
 14 452 RC  
 19B AUTOMATIC FLOOR SHIFT  
 30 BUCKET SEATS  
 33A JET THRUST ENG W SUPERCHG  
 37 DISC & POWER BRAKES  
 40 TACHOMETER  
 47 HD SPRINGS F & R  
 48 HD SHOCKS F & R  
 50 TWIN TRACTION  
 51 354 AXLE RATIO  
 54 FIRESTONE TIRES  
 56 670 4 PLY WHT BUTYL  
 60 CLINATIZER 72 RADIO PUSH  
 82 AC3180 L 84 AC3288 L&R  
 85 AC3288 L&R  
 600 AVANTI R2 SPEEDO W BEZEL

INSTRUCTIONS: Prepared by Car Order Dept. Studebaker  
 Distribute as required. PASSENGER CAR PRODUCTION ORDER—FINAL ASSEMBLY LINE PRODUCTION RECORD C

DATE TO SHIP			DATE WRITTEN			SALES ORDER NO.	ITEM	QUAN.	INST. BOOK	LINE NO.	FACTORY ORDER NO.	SERIAL NO.	
MO.	DAY	YR.	MO.	DAY	YR.								
										4348	74549	63V 23815	
BODY NO.			IGN. KEY NUMBER			TRUNK KEY NO.			FINAL ASSY. DATE			ENGINE NUMBER	
			4578			1479			2/20/63			JTS 1524	
DESTINATION									ZONE CODE			DATE SHIPPED	
									43 Z				
SHIP VIA												SHIPPER NUMBER	

DESCRIPTION OF UNIT AND EQUIPMENT

600 AVANTI WHEELS  
 600 SWAY BARS  
 600 REAR AXLE RADIUS RODS  
 600 AVANTI REAR AXLE  
 600 CARPETS F&R  
 92 SERVICE FOR RETAIL DEL  
 99 SEND TO ENGINEERING DEPT

Presently owned by Larry Scott, Cincinnati

INSTRUCTIONS: Prepared by Car Order Dept. Studebaker  
 Distribute as required. PASSENGER CAR PRODUCTION ORDER—FINAL ASSEMBLY LINE PRODUCTION RECORD C

JAMES J. QUIGLEY  
4 KINGSTON AVE.,  
ASCOT VALE, 3032  
MELBOURNE, AUSTRALIA



**Studebaker**  
CORPORATION

Phone: (03) 375 2602

19 May 1995

Mr Don Curtis  
Rural Route 1  
COLO, IOWA, 50056 USA

Dear Don,

Congratulations on your R1/R2 newsletter. I just received a copy from Max Arbrew. Noting your comments that future issues depend on "material and interest" I decided to put pen to paper and give you what I know from down under.

My own interest in J T Studebakers began in 1964 when my employer, Canada Cycle & Motor Co, who were assembling Studebaker CKD units here in Melbourne for the Australian Market decided to import two assembled L H C Daytona convertibles to evaluate market interest here. They were a R1 painted Astra White & a R2 in Bermuda brown both with powershift. After showroom exposure and the decision not to pursue further convertible orders, both units were sold to retail clients. Shortly after, the R2 received front page coverage in the Melbourne newspapers. Seems the owner, a Doctor, was speeding across town to a medical emergency when a police car, a Studebaker, took up pursuit and could'nt catch the Doctor. The matter was resolved in court. Both these units had been originally converted to R H C at our own assembly plant.

The only other J T unit that arrived new in Australia was a 1964 South Bend built R H C Cruiser R2. Ordered by the renowned Sydney based Studebaker Dealer, Bert Needham, this vehicle actually arrived prior to the Australian release of the 1964 model range. I wonder if this was the only RHC assembled vehicle of the 545 J T units of that year. I have enclosed a copy of the original production order for your interest.

The following is a list of the 63 & 64 J T models that I know presently existing in Australia. I do hope the attached information, photos and copy production orders generates future newsletters.

Keep in touch

Sincerely  
Jim Quigley

64V - 6639 Daytona Convertible R 1 with powershift in Astra White . Imported new by Canada's Cycle & Motor Co of Melbourne this vehicle was converted to RHC at Canada Cycles assembly plant. Body number is 201 and vehicle presently owned by Eric Bruton of 4 Kooyong Road, Armadale, Victoria 3143 who has owned it over 25 years. Eric States this car has travelled over 400,000 miles.

64V - 6774 Daytona Convertible R2 with powershift in Bermuda Brown Imported new with 64V-6639 as per above details. Body no is 200 and vehicle presently owned Chris Rundle of 6 Ida Crescent, Romsey, Victoria 4343. Chris has restored the car but paintwork in metallic grey and interior non original. Also converted for LPG use.

64V - 10513 Daytona Convertible R2 with powershift in Astra White. Imported by Jim Quigley in November 1994 after purchase from Bob May in Michigan . Vehicle had done limited miles and carefully cared for since full restoration by Harold Hendichs of Pennsylvania completed early 1983. Shown at 1983 South Bend meeting and achieved a Best of Show Award. I have made some improvement to the car since November . Excellent example for this rare body style. Body number is 279

64V - 8870 Cruiser Sedan R 2 with four speed in Strato Blue. Imported new by Bert Needham, renowned Sydney Studebaker Dealer. Bert upgraded this unit to R2 specifications. Bert died tragically in 1981 when a viscous fan flew apart on a R4 engine and struck his head. The vehicle remains in the family, however has deteriorated. Refer enclosed photos and production order. Was this the only factory build J T 1964 model right hand control model?

64V - 12414 Daytona hardtop R1 with four speed in Bordeaux Red. Imported by Max Arbrew in 1988, details are as your article "the other side of the coin" in Turning Wheels. Max sold this Vehicle to Bob Clark of 19 Laurie Street, Newport, Victoria 3015. Enclosed are current photos of this car.

64V - 18375 Daytona Sedan R1 with powershift in Horizon Green imported by Des Skinner of Brisbane in 1988, Max Arbrew purchased the car from Des and did a full restoration including conversion to right hand control. Max took off car of the show with the Daytona at our National meeting in Adelaide in 1993 - refer Turning Wheels, May 1994 which includes a copy of the production order. Photo enclosed. Max has since sold the car to Maurice Brockwell of Lot 15, Middle Swan Road, Caversham, Western Australia 6055.

63V - 16481 Wagonaire R1 with four speed in Blue Mist. Imported by Max Arbrew in 1990, this vehicle is highly optioned - re production order and in excellent order although the external paint colour had been changed to white in the U.S. Max sold this one to Maurice Brockwell also at the same time as the Horizon Green Daytona. Photo enclosed with production order.

63V - 25842 Hawk R1 with heavy duty automatic in Blue Mist. Imported by Des Skinner in 1989 and restored by present owner Robin Blackman of 3 Moore Road, Kurwongbah, Queensland 4503. Copy of the production order and a photo are enclosed.

63V - 11012 Lark 2 door Custom R1 with 4 speed. Either Regal Red or Super Red. Des and I drove this car from Los Angeles to the Las Vegas Meeting in 1989 and although the car had been generally neglected I can skill remember its responsive performance. Enclosed photo taken back in Los Angeles in 1989 prior to Des shipping it to Australia. Currently owned by David Allan of 54 Logan Street, Tenterfield New South Wales 2372.

# 1964 Avanti Powered GT Hawk Summary

by John Roam  
Midland, TX

	Manufactured	Known to Exist	% Exist
R-1 W/PKG 4 SPEED	20	5	25
R-1 W/PKG PS	40	7	18
R-1 WO/PKG 3 SPEED	1	0	0
R-1 WO PKG 4 SPEED	18	5	28
R-1 WO PKG Flgt&HDFI	8	1	13
R-1 WO/PKG PS	82	9	11
<b>Total R-1</b>	<b>169</b>	<b>27</b>	<b>16</b>
R-2 W/PKG 4 SPEED	19	6	32
R-2 W/PKG PS	27	7	26
R-2 WO/PKG	9	5	56
R-2 WO PKG Flgt & PS	15	3	20
<b>Total R-2</b>	<b>70</b>	<b>21</b>	<b>30</b>
<b>TOTAL R-1 and R-2</b>	<b>239</b>	<b>48</b>	<b>20</b>

Originally published in the "Wonderland Cruiser", Terry Judd Editor

## *Smokey and the Lark*

# State Police no match for Supercharged Studebaker

U.S. 31 between Holland and Grand Haven is a lonely stretch of highway at 4:30 in the morning.

I had just purchased the radio station in Grand Haven and hadn't found a home in the Tri-Cities yet. I was commuting from Holland each day.

Part of my job was to stop at the Michigan State Police Grand Haven Post at U.S. 31 and Robbins Road while on

my way to the radio station early each morning to check on overnight news happenings. The troopers soon got to know me and the car I was driving: a 1963 R2 Super Lark.

Radar wasn't used much in that spring of 1964. Troopers relied mainly on their skills in clocking speeding motorists.

Needless to say, I didn't watch the speed limit too carefully in the early morning hours...but I did watch my rear view mirror with some diligence.

One of the tricks by the men-in-blue of that day was to hide in a roadside park a few miles south of Grand Haven with headlights out. After the unsuspecting speeder

passed the park, the troopers would sneak out onto the highway and attempt to gain speed before turning on their lights. Speeders often didn't have a chance.

As I passed the rest area early one morning, I spotted the hiding pursuit car. Just a short distance past the park there is a wide curve in the highway. Once past that curve, my car would be out of sight for a brief period. And that was my opportunity.

I thought I spotted the car with lights out pulling onto the highway, just as I began rounding the curve. After making certain that its driver couldn't see me, my engine roared to life! Far back in the rear view mirror I could see headlights rounding the curve. Supercharger and Mallory Coil didn't fail me. It would take a better car than the blue sedan with the gold shield to catch me!

I wheeled into the State Police Post and was nonchalantly looking through overnight reports with the sergeant when a patrol car roared into the driveway. A spotlight waved back and forth through the office windows. A startled sergeant looked up, looked out...and just then heard a trooper on the two-way radio say with some chagrin, "Tell Doug to slow down next time."

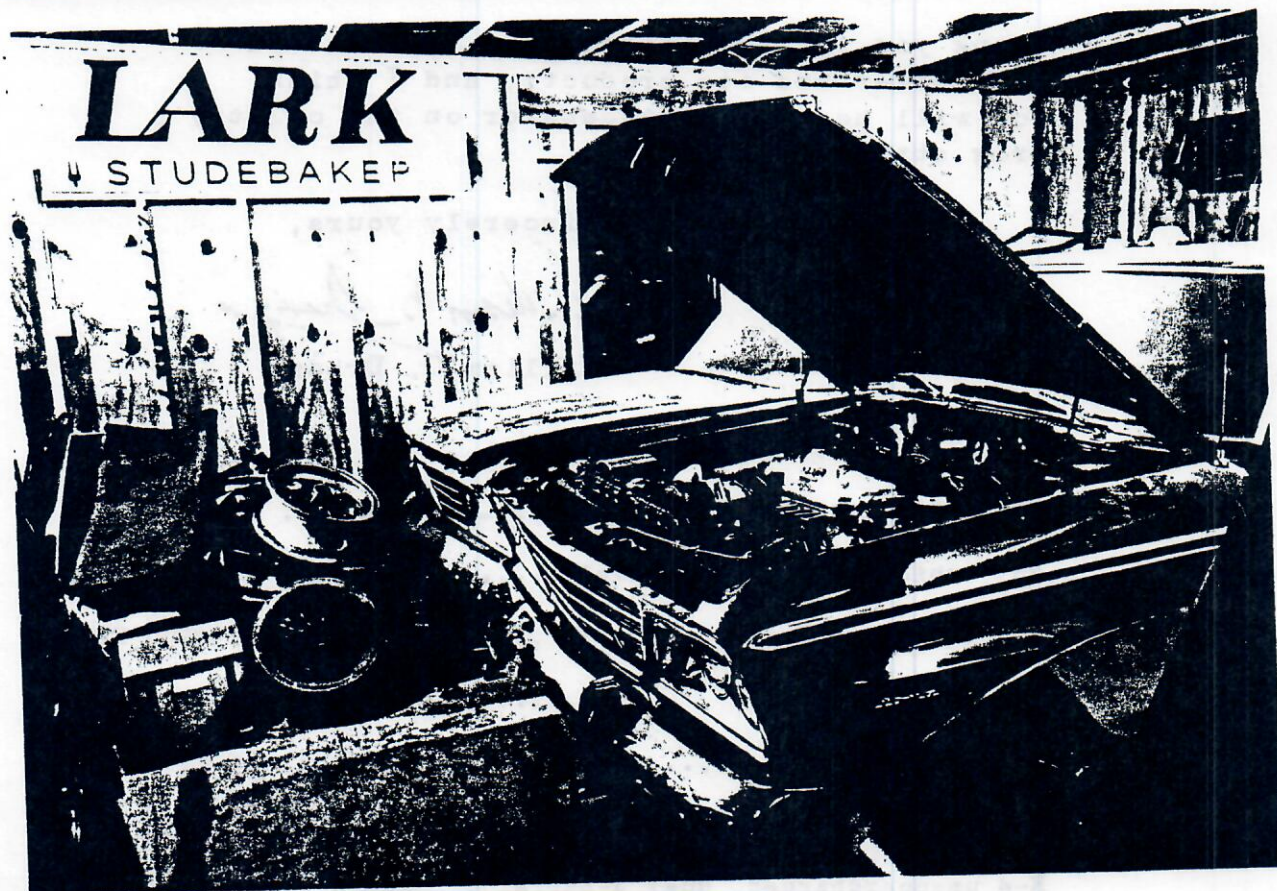
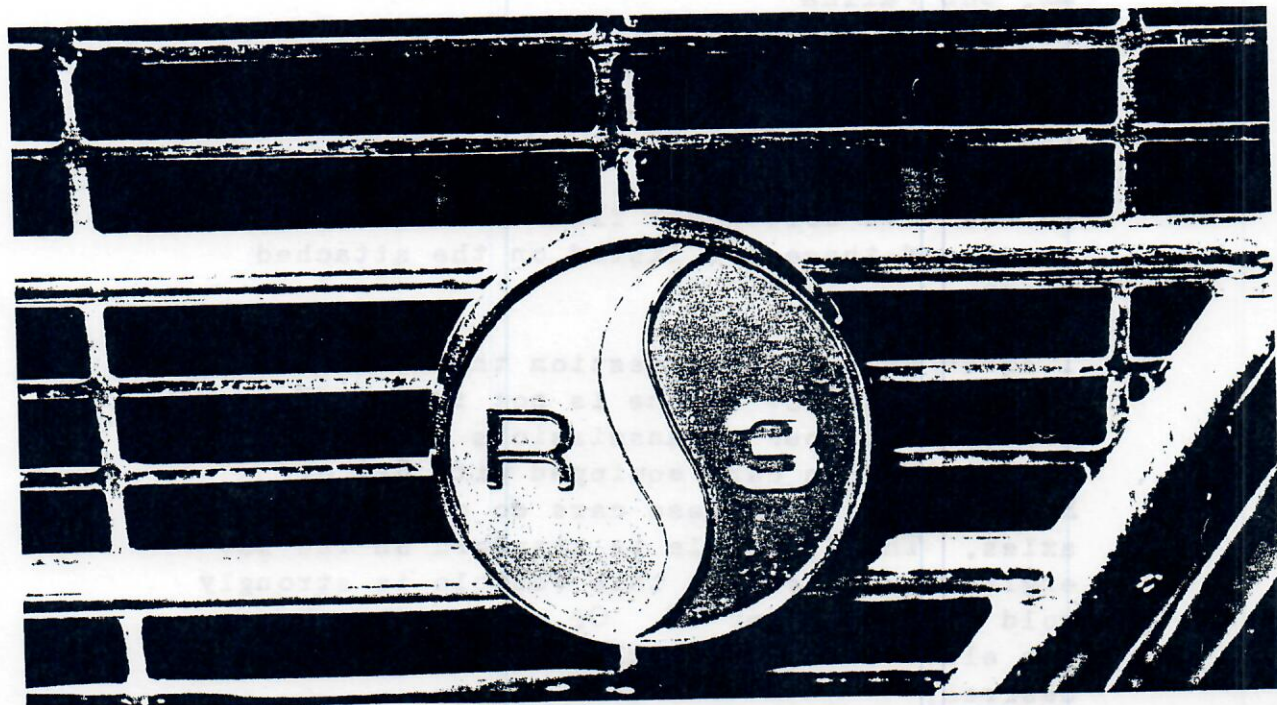
"What's going on?" the sergeant asked. "Were you driving a little fast?"

"Naw," I said. "It must have been someone else!"





64V 1078 currently owned by Nelson Bove of Cincinatti is the car modified by Paxton Products for use in the "Hot Rod Magazine" road test. Nelson points out the fact that the grille badge has been modified by adding a machined out "3". Nelson sent a number of photos showing how the R3 was installed. We will run these as space allows. Thanks Nelson!



November 25, 1963

Mr. Bob Palina  
5359 Mark Lane  
Indianapolis 26, Indiana

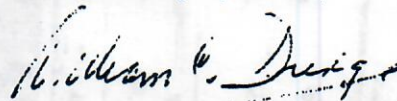
Dear Bob:

We now have horsepower figures on our 1964 cars, and these are listed on the attached sheet.

I agree with your suggestion that the axle ratio on our 259 engine is not ideal. However, the 4-speed transmissions are ordered almost 100% on cars equipped with R-1 or R-2 engines, and these cars do carry 3.54 rear axles. The 3.07 axle is standard on the 259 engined car, because this vehicle is strongly sold as an economy V8. Of course, any buyer can elect almost any axle ratio option he desires.

Thank you for your continuing interest in Studebaker and its products, and I think you will hear from Studebaker on the country's drag strips in 1964.

Sincerely yours,



William C. Dredge

Skybolt Six .....	112 h.p.
259 cubic inch V8 .....	180 h.p. at 4500 RPM
289 cubic inch with 2-barrel .....	210 h.p. at 4500 RPM
289 cubic inch with 4-barrel .....	225 h.p. at 4500 RPM
R-1 unsupercharged .....	240 h.p. at 5000 RPM
R-2 supercharged .....	289 h.p. at 4800 RPM
R-3 supercharged .....	335 h.p. at 5350 RPM
R-4 unsupercharged, dual 4-barrel ..	280 h.p. at 5000 RPM

**COUNTING HORSES**  
by George Krem

In 1962 and most of 1963, power ratings for the R1 and R2 Avanti engines were kept confidential by the Studebaker Corporation. Late in calendar year 1963, Studebaker released the 240 hp (R1) and 289 hp (R2) numbers. Some people had always wondered if the R2 engine was rated at its actual value, or if perhaps the company had underrated it to put Studebakers in a better class at the drag strip.

There is a way to get more information about this, and it can be found in an engineering paper by E.J. Hardig and M.P. deBlumenthal, of the Studebaker Corporation. In their paper--entitled The Avanti by Studebaker--a graph was used showing relative power output of three studebaker engines. No actual horsepower figures appear, but the R1/R2 engines are compared with the standard 289. We are not told what carburetion was installed on the 289, but by calculating horsepower per horizontal line for both a 289/210 hp and a 289/225 hp engine, we discover interesting results.

We estimated the power peak to be 9.35 lines or graph divisions for the "Lark" 289. Dividing the hp (210) by 9.35 gives 22.45 hp per line. Further estimating shows the R1 at 10.9 lines and the R2 at 13.5 lines. Multiplying each of these by the 22.45 hp per line, we get 244.7 hp for the R1 and 303 hp for the R2, both figures being fairly close to factory numbers. If, however, we assume the stock 289 had the four barrel carburetor (225 hp), then we get 24.06 hp per line, and the R1 and R2 are 262.2 and 324.8, respectively. These numbers seem a bit high, so it is my guess that the actual power was closer to 244.7 and 303. Note that these numbers were gross hp, not the "net" hp number often used today. Any comments?

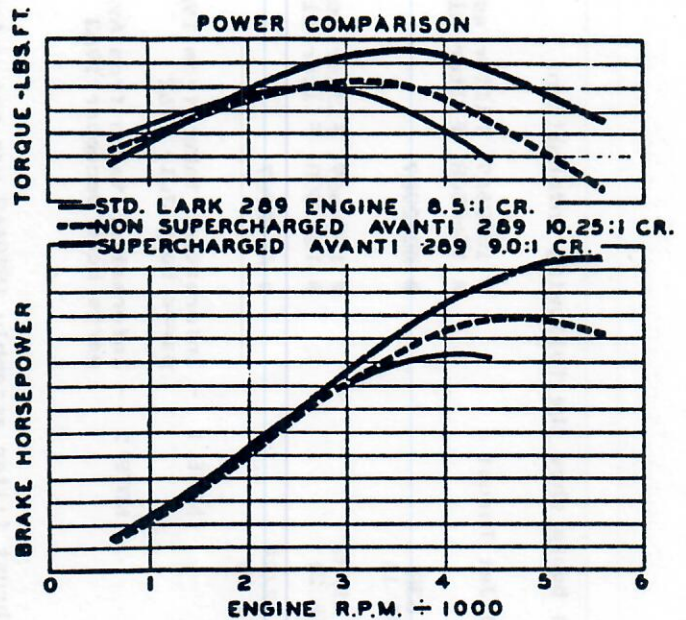
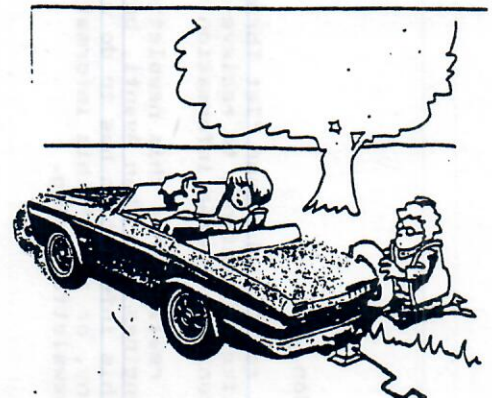


Fig. 20 - Power comparison

Table 1 - Avanti Performance With Two Passenger Load  
3.73 Axle and Auto. Transmission  
Test Weight 3950 lb

	Acceleration 0-60	Time for 1/4 Mile	Speed at End of 1/4 Mile
Supercharged Avanti	7.4 sec	15.4 sec	92
Nonsupercharged Avanti	8.4 sec	16.6 sec	87
Lark with 289 Engine	10.3 sec	18.4 sec	78



"Y'know, maybe it's not such a bad idea if your mother comes to live with us."

Dave Thibeault  
13 Nick Lane  
Maynard, Ma. 01754  
508-897-3158

Don,

I really like your "Jet Thrust News" newsletter, and would like to continue to receive it. So I figured I had better contribute some information to help.

I realize that this newsletter is aimed at the Jet Thrust engines more than Avanti, but they are closely related and this information has to do with both. Feel free to use any, or all of this information. Hope you keep this newsletter going.

#### ----- Jet Thrust and Avanti Fuel Filters -----

There are some differences between the fuel filter set up on Jet Thrust engines and most R1/R2 Avanti engines. This is not even clearly shown in the parts books. The following information is what I have been able to identify from parts books and my own experience.

The Lark/Hawk Jet Thrust engines all seem to have used the 1558669 glass bowl filter assembly. Every original Jet Thrust engine that I have seen used this and it is what is called out in the parts book.

This was a good choice of filter as it places the pressure return line at a high point in the fuel system. This allows any boiling fuel vapors to be returned to the tank and not forced into the carburetor where it would cause an over rich mixture. Less chance of vapor lock too. This would only happen in extremely hot weather and I have never had a problem with the AC-2987 filter on the Avanti.

There were two different fuel filters used on the Avanti and there also seems to be no note in the parts books as to when the change was made. I believe that the earlier vehicles all used the AC-2987 filter and then later ones used the 1558669 glass bowl filter like the Jet Thrust engines. Both our Avanti's (R4241 and R4679) had originally the AC-2987 filter. The AC-2987 filter is a replaceable metal cylinder in line filter.

The R3/R4 engines continued to use the AC-2987 filter and this is what was originally on my R3 engine (B-27).

The parts books show the following information:

- 1963-64 Jet Thrust
  - # 1558669 Filter assembly
  - # 1560508 Filter element kit
- Avanti 63R (NOTE 1)
  - # AC-2987
- Avanti R1/R2 (NOTE 2)
  - # 1558669 Filter assembly
  - # 1560508 Filter element kit
- Avanti R3/R4 (NOTE 2)
  - # AC-2987

NOTE 1 - Information taken from 1963 Avanti parts book July 1962

NOTE 2 - Information taken from Avanti parts book December 1963

The Jet Thrust filter assembly 1558669 was not unique to Studebaker and was available through auto parts stores. It has been discontinued but I have found many older parts stores that had them on the shelf still.

AC fuel filter number GF-97 is a Studebaker # 1558669 fuel filter assembly.

Try any auto parts store that carries AC filters and they may have one. If you go to a parts store that carries other filter brands and try to crossreference the part all you get is the filter element insert kit.

The element insert kit is readily available at most auto parts stores and is a Wix 33039 or a NAPA 3039.

The AC-2987 filter is identical to a Wix 33032 or a NAPA 3032 filter except that the Studebaker name and number is on the original. These are available from various Studebaker parts vendors.

For Avanti authenticity information I would like to know when Studebaker switched from the AC-2987 filter to the 1558669 glass bowl filter.

# Dakota Studebaker Parts

New and Used Parts  
Sheet Metal

Ken Voigt  
RR 1 Box 103A  
Armour, SD 57313-9801

Telephone  
Home 605-724-2527  
Work 605-384-5553

NOS 1964 Stude upholstery material.  
Commander Blue insert fabric, 6.7 sq  
yards, good condition. \$110 shipped.

Hawk or Cruiser Brown insert fabric.  
2.5 sq yards, Irregular cut, good  
cond. \$62 shipped

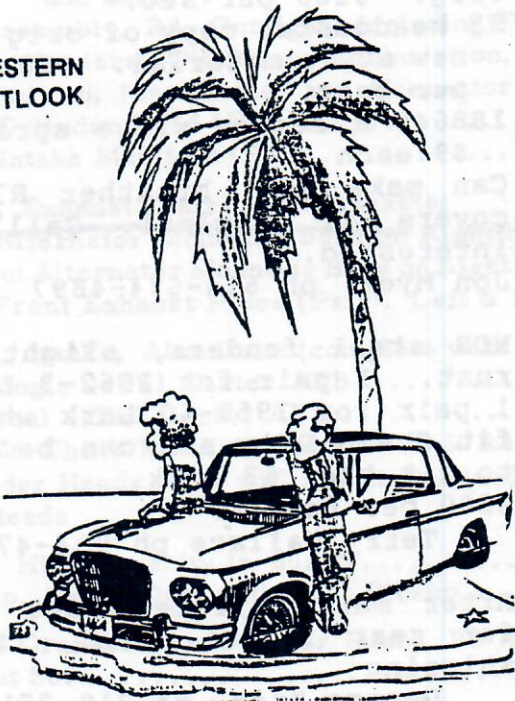
Daytona Brown insert fabric, 1.5 sq  
yards. Good cond. \$37 shipped  
Greg Curtis ph 515-377-2745 IA

Pair of R1 bare heads, used. \$25

63-64 GT Hawk rt front inner fender  
panel. NOS \$100

Misc dual-point dist parts.  
Dennis Day ph 319-364-7718 IA

WESTERN  
OUTLOOK



"Next time you drive and I'll read the  
road map!"

MORE JT WANTED.

JT, JTS, R, or RS rebuildable engine  
or block.

Mike Powers ph 817-467-1007 TX

1964 JT Hawk body with title. Also  
need '63 or '64 JT Hawk fuel tank.

Doug Crall ph 314-839-8780 MO

"Q CAR" page from gold 1963 Stude  
dealer ring binder notebook. Prefer  
an original but be pleased with a  
"quality" copy on heavy card stock.  
Thanks!

Don Curtis, the Editor.

HELP WANTED.....JT NAT'L MEET CHAIR

The SDC Internat'l Meet is in South  
Bend from June 22 - 28. From my  
correspondence and conversations I  
feel a large part of the JT tribe  
will be there. Many feel it would  
be appropriate to pick a time &  
place for a meeting. Any place with  
parking and, just in case, a roof.  
A park, church, restaurant, etc. So  
if anyone handy to the holy city  
would care to volunteer? Let me  
know before the next JTN. (late Jan?)

NOTICE - Classified ads are free so  
long as they have any connection to  
the JT Studebakers. Each ad will be  
run in two consecutive issues  
unless you request otherwise. DC

JOHN LONG



From bad to worse

TRADING POST

FOR SALE

63V 9051 1963 GT, R1, HDFlto, TT, Radio(Push), Discs, E.White with Red Vinyl Husband spent over \$20,000 restoring. \$18,000 obo.

Lana Simonetti, 1230 NE 3rd St. Pompano Beach, FL 33060

63V 21343 1963 GT, R2, 4spd, E.White. \$16,100 Firm.

Jerome Schaut, 216 Grandview Rd., St. Marys, PA 15857

63V 20440 1963 GT, R1, 4 spd, Black w Red int. A beautiful car, have owned since late 60's. Stored for several years.

Lloyd Frette ph 515-987-1136 IA

63V 1960 1963 GT R1, 4spd, Discs, PS, engine rebored .020 & balanced. New clutch parts. New paint and tires.(Appears to have '62 Hawk front clip.ed)

Ed Pritchard P.O. Box 180 Debeque, CO. 81630

From September DEALS ON WHEELS.

1964 Commander(64V 15802 per Tony Berbig) 2 dr B Red, R1, 3 spd minor rust, (not full pkg as advertised ed) \$2500

Motion Unlimited ph 605-348-7373 Rapid City

1964 Cruiser, R1, HD flto, 64V 9003 Silver w Green Int. Restorable. Runs, low oil pressure. New sheet metal included. \$1,450

1963 Lark Regal 2 dr. 63V 8835 Stripped parts car but has salvageable body with title and ID tags. Orig R2, 4 spd.Rolls. \$150

Keith Graham ph 614-837-7506

No Saturday calls, please. OH

R5642 1964 Avanti RB, Original factory R3, Power Shift, 3.54 TT, Halibrands w Eagle GA tires. 44,000 mi, Offers over \$37,500 considered. George Krem ph 319-351-4559 IA

\*\*\*\*\*

WANTED

160 MPH speedometer for 1963 Lark (black face). I would prefer NOS, but good used OK. I know someone has one - so name your price!

Allan Songer, 279 Park Ave, Long Beach, CA 90803  
ph 213-466-8201 M-F 8AM-5PM PT

PARTS FOR SALE

13 5/8" aluminum Stude flywheel \$150  
High speed (R3) fan for viscous drive, blades about 4" long, \$100

Lionel Stone Studebaker  
4476 Matilija Av  
Sherman Oakes, CA 91423

R3 Pistons - A very nice repo of orig. \$280 per set.

R3 headgasket copy of orig but with new style material. \$50 ea or \$80 per pair.

188645 R series valve springs NOS. \$9 each

Can make dual breather R3 valve covers as original. Call if interested.

Jon Myer ph 614-674-4897 OH

NOS steel fenders, slight surface rust. 1 pair for 1962-3 Larks and 1 pair for 1959-60 Lark which also fit Champ PU's and can be modified to fit the '63 Lark.

\$300 per fender.

Terry Wallace ph 904-478-7503

After market frame mount brackets for rear radius bars. \$40 plus shipping

George Krem ph 319-351-4559



**AUTHORIZED**

**Studebaker**

**SERVICE**

R3 and R4 PARTS & PRICE LIST - PL 5207 (Page 2 of 2)

Supersedes all previous schedules. Prices and availabilities subject to change without notice. Effective June 2, 1964.

DESCRIPTION	Reference Part No.	Suggested List	Net Cost
Engine Assembly, R3, Outright, including Carburetion, Fuel Pump, Oil Filter, Headers, etc. ready to run, less Starter and Alternator ..	1560600A	\$1660.00	\$725.00
NOTE: When Supercharger ordered with Engine add \$200.00			
Engine Assembly, R4, Outright, including Fuel Pump, Headers, Oil Pump, Carburetion, etc., ready to run, less Starter and Alternator .....	1563209A	1460.00	775.00
Gasket, Cylinder Head (Pair) .....	1560454A	15.00	8.50
Gasket, Intake Manifold (Pair) .....	1555713A	5.85	3.50
Headers, Exhaust (Pair), with Gaskets:			
<del>With Alternator Mounting Boss on Right Header ..</del>	<del>1563228A</del>	<del>83.50</del>	<del>50.10</del>
Without Alternator Mounting Boss on Right Header	1559213A		
Header Front Exhaust Pipes (Pair), Left & Right ..	1558640A-1	10.45	
Manifold, Intake, Aluminum (complete with studs):			
R3, Single 4-Bbl Carter AFB .....	1559216	66.50	39.90
R4, Dual 4-Bbl Carter AFB .....	1563068	99.50	59.70
NOTE: These Manifolds will fit R3 & R4 Cylinder Heads only; will not fit standard 289 Heads			
Oil Pan, High Capacity (6-quart) .....	1560452	48.00	35.00
Oil Pump, Heavy Duty with Dual Pickup .....	1560476D	83.50	50.10
Pulleys, Crankshaft and Water Pump, R3 High-Output Set .....	1560808A	75.00	45.00
Transmission, Automatic, with Torque Converter ..	1557163A	396.00	252.00
Transmission, Automatic (Power Shift) without Torque Converter .....	1557163	295.00	177.00
Transmission, 4-Speed (2.54 to 1, First Gear)	1557162	299.50	179.70
<del>Transmission, 4-Speed (2.28 to 1, First Gear)</del>	<del>1560587A</del>	<del>307.00</del>	<del>221.40</del>
Valve Lifters, Set .....	1549247A	20.00	12.00
Valve Rocker Arm Cover, Chrome, Dual Breathers (Pair) .....	1560463A	49.00	29.40
Valve Springs, Single, (Set of 16) .....	1560822A	12.50	7.50
Valve Springs, Dual, Complete with Shims, Washers, Retainers, etc. (Set of 16) .....	1660822A-D	55.60	41.70
Wiring, Silicone, 7 mm. High Tension Engine Set..	1560522A	27.00	16.20

35 00

NOTE: Prices are FOB Santa Monica, California and all orders require a 25% deposit with the balance going forward COD. Full prepayment eliminates COD Charges. All Sales are final and no equipment may be returned for credit or partial credit. Since all critical parts of these Assemblies are magnafluxed and 100% inspected for workmanship, material-quality and specifications, no further Warranty on these special Parts and Assemblies is expressed or implied.



Supersedes all previous schedules. Prices and availabilities subject to change without notice. Effective June 2, 1964.

DESCRIPTION	Reference Part No.	Suggested List	Net Cost
Camshaft, (new, not reground):			
276° Duration, 48° Overlap, .406" Lift...	1558819A	\$ 70.00	\$ ██████
288° Duration, 56° Overlap, .406" Lift...	1560816A	70.00	██████
Carburetor, Carter AFB, 1-7/16" Primaries, 1-11/16" Secondaries, sealed and calibrated for use with Supercharger, R2..	1561641	69.00	41.40
Carburetor, Carter AFB, Competition Model R3, 1-7/16" Primaries, 1-11/16" Secondaries .....	1558637	99.00	59.40
Carburetor, Carter AFB, 1-9/16" Primaries, 1-11/16" Secondaries:			
R4 Front, without Choke .....	1563051	69.00	41.40
R4 Rear, with Choke .....	1563052	69.00	41.40
Carburetor Air Chamber, R3, for Carter AFB, complete with Auxiliary Shaft and Levers, Vent Valve and Adjusting Hole Cover, Aluminum .....	38390B	99.50	59.70
Clutch and Pressure Plate Assembly, Heavy Duty Competition, 4-Speed .....	1563108A	68.00	40.80
Crankshaft Assembly, complete with Forged Pistons, Fitted Pins, Chrome Rings, Connecting Rods and all Bearings, balanced and micro-finished for proper clearances:			
R3, Compression Ratio 9.6 to 1, 3-21/32" Bore .....	1558926A-3	425.00	255.00
R4, Compression Ratio 12.0 to 1, 3-21/32" Bore .....	1558926A-4	425.00	255.00
Cylinder Head Assembly, with matching Aluminum Intake Manifold, includes Valves, Springs, Retainers, Retainer Seats, Dampers & Guides, Gaskets, Assembled and Bench Tested:			
R3 (with single 4-Bbl Manifold) .....	1558771A-3	510.75	306.45
R4 (with dual 4-Bbl Manifold) .....	1558771A-4	524.50	314.70
NOTE: For Dual Valve Springs, add (Specify)		43.10	34.20
Cylinder Block and Bearing Caps Assembly, 304.5 cu. in., chamfered for big Valves ..	1560487	165.00	99.00

SUBMITTED BY GEO KREM  
PRICES NOT CURRENT!!



# STUDEMEMORIES

by doug tjapkes

It was the fall of 1963. My fine Studebaker R2 Super Lark was at its peak. The bearings had already needed replacing in the supercharger. The engine had been tuned up by Randy Presley, the best Studebaker man around.

It was early evening, and Marcia and I were going to make the short drive from our home north of Grand Haven to Muskegon.

As we came down the exit ramp I noticed a most unusual sight out of the corner of my eye.

A Corvette and an obviously hopped up Chevy had stopped on U.S. 31 northbound, and were lining up. They were staging a little impromptu drag race on a public highway! In that day, U.S. 31 didn't carry the amount of traffic that it does today, especially in the early evening. The tourist season had come and gone for the year. In fact, except for the two would-be racers no one was around. It was the perfect opportunity for them, they had good weather and a good straight shot. It would be some race.

What they hadn't counted on was an intruder sneaking up on their right.

I said to Marcia, "Watch this!"

The two drivers still hadn't seen me, so I dropped down into 2nd gear with my four speed floor shift. 2nd gear was a real power gear when you gave the blower some rpm's, and I had all the time and space to do it right. I didn't accelerate hard until the last minute, knowing that my loud pipes would give me away.

At precisely the right moment, the pedal hit the metal! I roared past the two racers just as they were about to take off...my head start was phenomenal! I watched in my mirror as cars lurched and tires smoked. But the two brand X vehicles remained in my mirror until it was time to slow down, their drivers disappointed by a little Studebaker Lark.

All I lacked was the checkered flag!

DATE TO SHIP			DATE WRITTEN			SALES ORDER NO.	ITEM	QUAN.	INST. BOOK	LINE NO.	FACTORY ORDER NO.	SERIAL NO.
MO.	DAY	YR.	MO.	DAY	YR.							
10	28	63	10	17	63	24183				3969	52768	
BODY NO.			IGNL KEY NUMBER			TRUNK KEY NO.		FINAL ASSY. DATE		ENGINE NUMBER		
1416			5188			1513		10/30/63		JTK 329		64V 15466
DESTINATION									REGION CODE		DATE SHIPPED	
HIBBING, MINN.									21		/ /	
SHIP VIA												
73 NYC IHB CMSTP&P MPLS CLARK												
DESCRIPTION OF UNIT AND EQUIPMENT												
MODEL 64VJ8 4238 DAY 8 2 DR HARDTOP												
PAINT 13 P 6413 STRATO BLUE												
TRIM 14 929 BV VINYL TRIM												
20 AUTOMATIC FLOOR SHIFT												
36 HIGH PERF PKG R1												
42 BUCKET SEATS RECLINING												
51B 670 BLK												
59 PADDED SUN VISORS PR												
60 CLIMATIZER 66 RADIO PUSH												
70 UNDERCOAT 71 FRONT BUMP												
X79 WHEEL DISC												
SOLD RUSH												
OWNED BY GARY OLSEN, FARGO												
INSTRUCTIONS: Prepared by Car Order Dept. Distribute as required.												
Studebaker												
PASSENGER CAR PRODUCTION ORDER—FINAL ASSEMBLY LINE												
LINE SETTING FILE COPY												

Dear George,

September 26, 1996

Just a short note to update: Did some more tinkering with Turbos and went to the test and tune night at the strip last night. Enclosed is a copy of all the runs. The first three were practice or time trials and then they hold a trophy eliminator and this is the last five. There were only 32 cars in the trophy eliminator. I made all my runs in the left hand lane and you will notice we won all eight races.

I did a lot of little things but I think the thing that helped the most was adjusting the brakes up as tight as I could with only a slight drag. Then on the line, I was able to torque it up more on the line without scooting the front tires through the lights. I was able to get about 2800 to 2900 stall on the line and the boost started coming up and had about 2 pounds at that point.

I also found (practicing on the country road here at home-don't tell the law!) that the longer I could hold the stall, the more the boost seem to come up. I think this is the reason for the differences you see in the runs (except for eliminations when I backed out near the end of the quarter to be sure not to break out). It is difficult to rev it up for the same amount of time on each run due to how soon the starter turns on the tree.

The boost was about 17 pounds at the carb and 15 in the intake manifold. I would like to keep it about three pounds less than this as the Paxtons were until I get the dual fours on. I got in the points system and won enough to go to an Ohio meet the first weekend at Norwalk, Ohio. This is a big meet where all points winners from all the IHRA strips in this part of the country go for competition among the various strips. A total of 30 go from each strip. There were about 150 competitors at Muncie.

The third run shows the 11.543 at 117.49 mph; this is the all time best so far. Also, on that same run, the 95.94 was the best speed for the eighth mile. On the last run, the 7.363 was the best ever eighth ET and notice it only turned 94 mph in the quarter, so I don't know what the quarter ET and speed would have been had I stayed in it, but did not want to take the chance of breaking out. The trophy didn't mean diddley, but it was the last race of the night about 11:00 pm and there was quite a crowd that had been staying, watching, talking, etc. about the car, and I wanted them to see the Stude's win light come on if possible.

I am having trouble with the turbo on the left side with an oil leak. The place I got it from thinks the drain is not good enough. It does not go down as straight as the right side. I put a bigger outlet on the turbo itself which is bigger than the turbo opening and went from a half inch drain

tube to a one inch I.D. and it still leaks. It is pretty bad on the first run, then seems to get better from then on. I don't know if it is because the oil is not as hot on the first run and doesn't flow as well down the drain, or if the seal gets tighter after the turbo is heated up good or ??? The next thing I plan to do is restrict the size of the oil feed line. It was 3/8" and I reduced it to 5/16", and plan to go to 1/4". The place I got them from said the 3/8" was good but Tom Covington and others tell me the 1/4" is plenty big enough and it is not that critical.

I wanted to change exhaust housings but rain is predicted for this weekend and I don't want to do it without having a chance to try it before going to Ohio so I will leave it as is, especially since it is only eighth mile racing. The bad thing about the Ohio meet is it is on the same weekend as the Hill Climb, so I won't be able to go there.

If there is any of this that you need for filler for the Jet Thrust News, feel free but definitely NOT necessary.

Will let you know what develops next.



NEWS FLASH

Geo reports  
Ted ran a 11.15  
Approx 120!!

TED'S TIMING SLIPS

COMPULINK SYSTEM III

Welcome to Muncie Dragway  
 !!! THIS WEEK !!!  
 Ball State Night  
 Moser Engineering Quick 8

4:58 PM  
 25/SEP/96

Car # ...	Class ...	LEFT	RIGHT
289		149.1	
DIAL ...			
R/T ...		.507	.615
60' ...		1.895	1.763
330 ...		5.052	4.923
1/8 ...		7.638	7.612
MFH ...		94.67	91.14
1000 ...		9.885	9.955
1/4 ...		11.807	11.966
MFH ...		116.33	111.49

Left 1st 267  
 7:26 PM  
 25/SEP/96

Car # ...	Class ...	LEFT	RIGHT
289		175	
DIAL ...			
R/T ...		.567	.599
60' ...		1.781	1.860
330 ...		4.871	5.345
1/8 ...		7.426	8.242
MFH ...		95.94	84.36
1000 ...		9.642	10.762
1/4 ...		11.543	12.893
MFH ...		117.49	105.73

Left 1st 1.382

COMPULINK SYSTEM III

Welcome to Muncie Dragway  
 !!! THIS WEEK !!!  
 Ball State Night  
 Moser Engineering Quick 8

6:06 PM  
 25/SEP/96

Car # ...	Class ...	LEFT	RIGHT
289		107	
DIAL ...			
R/T ...		.578	.423
60' ...		1.758	1.881
330 ...		4.893	5.242
1/8 ...		7.486	8.086
MFH ...		94.54	86.27
1000 ...		9.737	10.538
1/4 ...		11.661	12.674
MFH ...		116.30	106.04

Left 1st .858  
 8:22 PM  
 25/SEP/96

Car # ...	Class ...	LEFT	RIGHT
289		1124	
DIAL ...			
R/T ...		11.70	14.06
60' ...		.553	.497
330 ...		1.860	2.081
1/8 ...		.000	5.854
MFH ...		7.619	9.018
1000 ...		94.30	76.03
1/4 ...		9.875	11.857
MFH ...		11.803 <MIN	14.243
		116.02	94.27

Left 1st .084

duty spring set up will decrease the life of Supercharger, the more pressure the clutch pack exerts on the race's the less they live of a normal life span. I have almost 100k miles on my Paxton and have a little more than normal pressure on my clutch pack, so they will live with regular oil changes, they get very hot and the heat will break down the oil before it wears out. When I change the oil I remove the complete unit from the bracket and lay it down on a clean bench with clean papers spread out, lay it down so that the output side is laying on bench. Remove the bolts that hold front half to center half and carefully pry the two halves apart. It shouldn't take much to get it apart. There is only the friction of two "O" rings sliding on the metal keeping it from falling apart. Lay the top part over on papers and lift out clutch pack. Now you can wipe out and soak out all the old oil, and any dirty residue. Use a good paper towel (no cloth rags) rags leave lint and this will plug up oil pump screen when it is reassembled. After it is all clean you can now inspect it and reassemble it. If you don't think you can remember how the two halves are indexed you may want to make a small mark on bottom across the seam so you will have the two marks to line up for reassembly, tighten the bolts around the outside a little at a time until tight and then fill to full mark after installation, turn pulley by hand several times before you install the belt and now you are ready to run and have fun. OR you can simply remove the supercharger and remove dipstick and dump old oil out and refill and reinstall but you don't get it clean this way or get dirt out. Never leave open on bench or don't do this when there is a lot of wind as dirt may blow into open supercharger and this must be kept as clean as an operating room.



## Care of Supercharger

This cover's both early McCulloch and later Paxton Superchargers as they were the same unit except for the split front pulley or variable drive feature. After McCulloch sold the chain saw division of McCulloch Manufacturing he no longer could use the McCulloch name so he simply changed it to the Paxton Supercharger as his name was William Paxton McCulloch. The variable drive part of the supercharger was the only part that gave major problems as there was no means to lub this part of the supercharger except tear it apart, so they did away with this feature on the Paxton units. They still used the same castings, and you can see on your Paxton equipped Lark, Hawk, and Avanti there is still a hole under the sticker where the solenoid was when it was built as a McCulloch and you can still see a line on front surface where the piston housing was cut off of the casting, there is a parting line still present. If your front housing has only the mounting holes to mount it on the bracket and no more then it is most likely the original as they had a dedicated front housing to only mount on one application. If it has holes all the way around then it started out life as a Universal type that could be mounted on anything, so there was mounting hole's all the way around outside. Also they came painted a deep orange, almost same as what is called Chevy orange today when new in 63-64 and when they went back to Paxton to be rebuilt they got painted black.

You should change the oil at least once a year or every 10K miles. If it is only driven a few times a year you should still change the oil every year, as this is in most case's even harder on them than driving a lot of miles. I pick July and make it a point to change oil every July as I am getting ready to go on vacation and like to have new oil in it for a long trip. I have driven my Avanti R-2 $\frac{1}{2}$  on trips of 9000 and 7500 miles on two occasions in the past and loved it. I use type F ATF but you can use Dextron or Mercon also. Just be sure you don't mix types. The main reason I use type F is because this is what I use in my cars that are automatic trans equipped and that way I only have to keep one type ATF on shelf. Don't use engine lubricant or additive to the supercharger and I don't think I would try any synthetic as the purpose of a synthetic oil is to make metal slid better or make things slippery and this would defeat the way the clutch and planetary ball set work, as they require a certain amount of friction to function, the pressure on the clutch pack that is controled by number of springs and there pressure pushing on the half race against the balls is what cause the impeller to spin and you don't want this to slip. When you over speed this unit it will leave shiny lines around the balls and shortly afterward it will fail. So why would you want something that made it even more slippery that ATF. You can by adding a washer under the springs in clutch pack upgrade so it will go higher in RPM range before it slips. But nothing is free and the heavy