

Mitsubishi/Satoh tractor information, parts, and support

MITSUBISHI/SATOH HISTORY

Satoh: The Satoh name is quite old in Japan, and the gasoline-powered S650-G model dates back to the early 1960s. Along with the gasoline-powered Satoh models, Mitsubishi tractors were sold in the US as Satoh products in the 1970s-early 1980s. Satoh's US models had model numbers beginning with S followed by *three* numerals and often an animal name (example: S370 Beaver), with the suffix D indicating 4wd. Satoh officially merged with Mitsubishi on 1 February 1980, and Mitsubishi committed to supporting Satoh models with parts for at least 25 years after the merger. Leftover Satohs in US dealer stock were issued new Mitsubishi decals, and certain models continued to be sold into the 1980s as "Satoh by Mitsubishi". Many of the Satoh tractors sold here had 2-cylinder diesel engines made by Mitsubishi. Grey-market tractors, which are used Japanese-spec tractors imported from Japan, have appeared here under both names.

"Mitsu": In Japan and certain other markets, Mitsubishis were also labeled with other names including Suzue, VST, and Kumiai. Some of these have also shown up here as grey-market tractors. After the merger with Satoh, Mitsubishi sold tractors during the 1980s in the US under its own name, and those model numbers began with MT followed by *three* numerals (MT160, MT160D, etc.) with the suffix D meaning 4-wheel-drive. Most US-spec Mitsubishis used 3-cylinder diesels. For these tractors the manual *Mitsubishi Shop Manual Models MT160, MT160D, MT180, MT180D, MT180H, MT180HD, MT210, MT210D, MT250, MT250D, MT300, MT300D* (ISBN 0872884422, paperback published by Intertec in 1987, Intertec volume M-1) can be ordered through conventional bookstores including www.amazon.com. Grey-market Mitsubishis labeled as Mitsubishis typically have model numbers beginning with D or MT followed by *two* or *four* numerals (examples: MT14, D2000). Similar grey-market Satohs have model numbers beginning with ST, usually with *four* numerals (example: ST1800). Some related Suzues have model numbers beginning with M. As with US-spec models, the suffix D indicates 4wd.

Also: Mitsubishi tractors were also sold as Case IH compacts in the US in the 1980s. These were the 2x4/2x5 series (234, 235, etc.). Another Intertec volume covers these tractors: *Case/International Shop Manual Models 235, 245, 255, 265, 275* (ISBN 0872885704, paperback published in 1995, Intertec volume C-42). Since 1993 Mitsubishis have been sold in the US as the Cub Cadet 7xxx series (example: 7260). Dealers for these lines may be able to support some grey-market Mitsubishis, though some may not want to help.

For reference, the current Mitsubishi models for export are the MT200, 20 hp; the MT260, 26 hp; and the MT301, 30 hp. The Japan-only models range from the MT161, 16 hp, to the MT468, 46 hp. All have 4wd.

US MODELS

The following Satoh models were officially sold in the US. Certain models such as the Beaver variants and the Bull continued to be sold as Mitsubishis for a few years after the merger, with the S replaced by MT (example: S373 became MT373). The MT372 was available until the late 1980s. Suffixes have been left off:

Satoh model	Engine block, description
S370 Beaver	Mitsu KE70, 2-cyl diesel, 669 cc
S372 Beaver II	Mitsu KE70, 2-cyl diesel, 669 cc
S373 Beaver III	Mitsu K3A, 3-cyl diesel, 776 cc
S470 Buck	Mitsu K3B, 3-cyl diesel, 849 cc
S550-G Elk	Mazda PB, 4-cyl gas, 987 cc

S630 Bull	Mitsu KE130, 2-cyl diesel, 1246 cc
S650-G Bison	Mazda PB, 4-cyl gas, 987 cc OR Mazda TA/TB, 4-cyl gas, 1169 cc
S670 Bison	Mitsu K4D, 4-cyl diesel, 1305 cc
S750 Stallion	Isuzu 3AB1-1, 3-cyl diesel, 1777 cc

The following Mitsubishi models were officially sold in the US during the 1980s. Suffixes have been left off:

Mitsubishi model	Engine block, description
MT160	Mitsu K3A, 3-cyl diesel, 776 cc
MT180	Mitsu K3C, 3-cyl diesel, 900 cc
MT210	Mitsu K3D, 3-cyl diesel, 979 cc
MT250	Mitsu K3H, 3-cyl diesel, 1290 cc
MT300	Mitsu K3M, 3-cyl diesel, 1496 cc

The Case IH 2x4/2x5 models (234, 235, etc.) were similar to these Mitsubishis, except that the Mitsu K3B (849 cc) and K3E engines were also used. Finally, certain Bolens models sold in the late 1970s-early 1980s used Mitsubishi KE70, KE75, K3A, and K3B engines, but were otherwise Iseki tractors.

GREY-MARKET MODELS

I.D.: To identify the closest US-spec match for a grey-market Mitsubishi or Satoh model, the place to start is the engine block. The engine designation and displacement are cast into many of the Mitsubishi diesel blocks. Some information may also appear on a data plate on the side of the frame. As a rough guide to some of the smaller tractors, those Mitsubishi D-series tractors with a model number under 1500 were often based on the same frame as that of the Beaver. Those with model numbers between D1500 and D2350 were often based on the same frame as that of the Bull. But there are exceptions, and certain grey-market models may not be closely related to any US-spec model. Other dimensions such as wheelbase may be useful for enabling a vendor to cross over a grey-market model. The frame number may also be useful and is typically stamped in large characters on the right side of the frame under the driver's seat. Sometimes the year of manufacture is stamped on the wheel rims, but beware because dealers do change wheels. (Often these tractors are misrepresented as newer than they actually are.) The engine serial number, which is different from the frame number, is stamped on the block. To use the KE engine as an example, it is on the exposed top of the block between the two cylinders.

Manuals: After identifying the tractor and its closest US-spec match, consider getting the operator's/owner's, service/shop, and parts manuals for the US-spec version and the parts manual for the grey-market version. Parts manuals for the grey-market Mitsubishi and Satoh tractors are printed in Japanese and English, but other manuals for "greys" are generally not available in English. It makes life easier for vendors if you can specify a part number for a US-spec version; in the past some even offered price discounts for those who could provide part numbers.

Engines: Most of the grey-market Mitsubishis used engines that are in the same families as those of the US-spec models, though displacements might be different.

KE: The KE family of 2-cylinder diesels includes versions from the KE55 through the KE135, with the numerical part indicating the approximate engine size in deciliters (= 10 × cc). The KE140 and up have 4 cylinders. Versions known to have been used in US-spec and grey-market tractors include the KE70, KE75 (764 cc), KE80, KE85 (854 cc), KE95 (964 cc), KE130, and KE140. The KE70, KE75, and KE130 were used on tractors officially sold here, including the Bolens/Iseki models already mentioned. Other versions exist.

K3, K4, gas: The K3 family of 3-cylinder diesels includes designations K3A, K3B, K3C, K3D, K3E, K3F, K3H, and K3M. All except the K3F were used in US-spec tractors. Other versions may exist. The K4 family of 4-cylinder diesels was used in certain larger models, primarily the K4D. Some grey-market models have used a 4-cylinder gasoline engine, which is probably related to the Mazda industrial units used in the Satoh S550-G and S650-G. These gasoline models seem to have model numbers ending with -50 (example: D1650), but a model number ending with -50 does not mean it cannot have a diesel engine. A few other engines are also out there.

Suffixes: For grey-market and many US-spec models, the suffix D means 4wd. For example, the S630 was 2wd; the S630D was 4wd. Other suffix letters denote other features (H = hydrostatic, etc.). Several grey-market models had newer versions with a Roman numeral II; for example, the D2000 was superseded by the D2000 II. Parts manuals are different for the two versions. Among the models this applies to are the D1500 (II), D1600 (II), D1800 (II), D2000 (II), and D2600 (II).

BASIC PARTS PRINCIPLES

Replacement parts from Mitsubishi are very expensive. This means that maintenance and common sense in using these tractors are important. Concerning maintenance, oil and filters are cheaper than engine overhaul parts. Use good diesel-rated oil and diesel fuel with appropriate additives for cold weather. And learn how to reprime the fuel system properly; do not use ether or apply pressure to the fuel tank. Concerning common sense, some anguished posts appeared some time back on certain forums when compact tractor owners installed aftermarket front-end loaders and then broke the frame in half by proceeding to use their tractors as mini-bulldozers.

When repairs do become necessary, see if the parts can be repaired with a local vendor first or see if a good auto/tractor parts dealer such as NAPA can cross over a part that you bring in. When possible, rebuild water pumps and clutches and recore radiators locally rather than replace them. Remove the fuel tank and clean and reseal it rather than replace it if it leaks. One poster on Yahoo! reported that after he brought in his tractor's throwout bearing, his NAPA dealer was able to cross it to one from a Mitsubishi sedan. Others reported that their auto parts dealers were able to match alternators. Some all-terrain vehicle (ATV) dealers may have compatible headlight bulbs. Keep these options in mind. Also, some tractor dealers may have a small boneyard of salvage tractors for parts, but they may not want to sell to someone who didn't buy a tractor from them.

A list of maintenance parts for many of these tractors appears after the vendor list.

MANUFACTURER ADDRESS:

Mitsubishi Agricultural Machinery Co., Ltd.
 Overseas Sales Department
 Shinjuku Mitsubishi BLDG 15-1
 Tomihisa-cho
 Shinjuku-ku 162-0067
 JAPAN
 Phone: +81-3-5360-7333
 Fax: +81-3-5360-7347
 E-mail: tractor@mam.co.jp
 Web: www.mam.co.jp/english/

PARTS AND MANUALS

Please note: Handler's Used, Mitsubishi Engine, and R. M. Wade *will not* sell to individuals, but only to dealers. They are included here because you may see their names or other info in posts and

websites. Do NOT call them.

Bay Implement Co.: See Darrell Harp Enterprises

Best-Used-Tractors: See note under Handler's Used

Cozy Cab: See Custom Products of Litchfield

Custom Products of Litchfield, Inc.
Cozy Cab Division
(Rollover protection systems (ROPS) and cabs for US-spec Mitsubishis)
P. O. Box 718
Litchfield, MN 55355
Toll free 800-222-5463 (800-CAB-LINE)
320-693-3221
Fax: 320-693-7252
E-mail: through website
Web: <http://www.800cabline.com>

Darrell Harp Enterprises/DHE/Bay Implement Co.
(Mitsubishi/Satoh parts; US-spec & grey)
Attention: Sherry Richardson
819 4th Street NW
P. O. Box 140
Red Bay, AL 35582
Toll free 800-445-3943
256-356-4424
256-356-4306
Fax: 256-356-8300
E-mail: -- (no longer has e-mail)
Web: --

GD Equipment
(US-spec Mitsubishi/Satoh parts; NAPA supplies)
Attention: Aaron Shirk
414 Rowe Road
Shippensburg, PA 17257
717-530-0170
Fax: --
E-mail: --
Web: --

Grey Market Tractor Parts: See Sutton Tractor

Handler's Used Tractor Parts
(Used/salvage parts; grey; SALES TO DEALERS ONLY)
39451A Number 3 Road
Abbotsford, BC V3G 2G1
CANADA
604-850-3601
Fax: 604-850-7122
E-mail: --
Web: <http://www.handlersused.com>

As of April 2002 Handler's will sell only to its affiliated dealers. Geoff Beukens and Best-Used-

Tractors in Washington state are no longer connected with Handler's. Handler's and Best-Used no longer sell to individuals.

Canada contact:

SRS Sales & Repair Service
Attention: John Clark
5955 Darcy Road
Grand Forks, BC V0H 1H4
CANADA
250-442-0465
Fax: --
E-mail: SRSSales@direct.ca
Web: <http://www.srssales.homestead.com>

Homestead Tractor
(Parts including used/salvage, manuals; grey)
22311 Bear Valley Road
Apple Valley, CA 92308
760-240-1062
Fax: 760-240-1126
E-mail: hstractor@earthlink.net
Web: <http://www.hstractor.com>

JENSALES/Warren D. Jensen
(US-spec manuals; some starters and alternators)
200 Main Street
Manchester, MN 56064
Toll free 800-443-0625
507-826-3666 (tech line)
Fax: 507-826-3777
E-mail: jensales@jensales.com
Web: <http://www.jensales.com> [other sites including www.yesterdaystractor.com link to this site]

Lowe's Tractor & Equipment, Inc.
(Used/salvage Mitsubishi parts; US-spec & grey)
2372 West State Road 46
Greensburg, IN 47240
812-663-8928
Fax: 812-663-7943
E-mail: lowesttractor@yahoo.com
Web: <http://www.treecity.com/dleas/greymark.html>

Lynchburg Equipment (Bruce Laten): No longer in business; see Tullahoma Tractor

Mitsubishi Engine North America
(Engine parts; SALES TO DEALERS ONLY)
1250 Greenbriar Drive, Suite E
Addison, IL 60101
630-268-0750

Does not sell to individuals. Certain vendors can get parts here for grey-market tractor engines that were not used in US-spec models.

Red River Tractor, Inc.
(Parts; US-spec & grey)
Attention: Ashley Tuttle

15785 Highway 4 East, Box 1169
Senatobia, MS 38668
Toll free 877-337-4872
662-562-6622
Fax: 662-562-6007
E-mail: redrivertractor@gmi.net
Web: --

Sheaf Tractor/Sheaffer's Town & Country Tractors, Inc.
(Parts and manuals, including salvage; US-spec & grey)
Attention: Leonard Sheaffer
320 Palmyra Road
Dixon, IL 61021
815-284-3226
Fax: 815-284-5050
E-mail: sheaftractor@coiinc.com
Web: --

Southern Global Tractor
(Parts for newer US-spec Mitsubishis)
Attention: Anna Acker
230 North Magnolia Drive
Wiggins, MS 39577
Toll free 866-742-5748 (866-PICK-SGT)
601-928-7491
Fax: 601-528-9312
E-mail: acker@ebicom.net
Web: <http://www.southern-global.com>

SRS Sales & Repair Service: See Handler's Used Tractor Parts

Stull Company/SEI Parts/Allegheny Lawn & Golf Products
(Official US-spec Mitsubishi/Satoh parts and manuals)
701 4th Avenue
Coraopolis, PA 15108
Toll free 800-229-7885
412-262-1405
412-262-8091
Fax: 412-262-0826
E-mail: info@algpinc.com OR info@stullequip.com
Web: <http://www.algpinc.com> OR <http://www.stullenterprises.com>
Mitsubishi's website refers directly to Stull as its East Coast parts distributor. Stull sells to dealers and to individuals.

Sutton Tractor/Grey Market Tractor Parts
(Used/salvage parts; grey)
6709 North I-35 Frontage Road
Edmond, OK 73034
Toll free 800-700-4739 (800-700-GREY)
405-340-0268
Fax: 405-340-3728
E-mail: suttontractor2@hotmail.com
Web: --

Tullahoma Tractor
(Parts; grey)
Attention: Bruce Laten
607 South Jackson Street
Tullahoma, TN 37388
931-455-6999
Fax: 931-393-2795
E-mail: parts@yanmartractors.com
Web: <http://www.yanmartractors.com>

Valley Power Products, Inc.
(Parts including used/salvage, manuals; US-spec & grey)
Attention: Bill Rodgers or Lemuel Battle
3646-5 Aerial Way Drive
Roanoke, VA 24018
540-345-9650
Fax: 540-345-9647
E-mail: vppinc@rev.net
Web: <http://www.valleypowerproducts.com>

R. M. Wade
(Official Mitsu/Satoh parts; SALES TO DEALERS ONLY)
10025 Southwest Allen Boulevard
Beaverton, OR 97005
503-641-1865
Fax: 503-626-8295
E-mail: --
Web: www.rmwade.com
Wade is the official West Coast distributor for Mitsubishi and Satoh parts, but sells only to dealers, not individuals.

Wengers of Myerstown
(Used/salvage parts; US-spec & grey)
831 South College Street
P. O. Box 409
Myerstown, PA 17067
Toll free 800-451-5240
717-866-2135
Fax: 717-866-7866
E-mail: through website
Web: <http://www.wengers.com>

SUPPORT SITES ON WEB

In March 2002 Yahoo! changed the old "clubs" to "groups". The new formats are much less convenient for many users.

http://www.andrew.cmu.edu/user/kb13/ans_grey.htm
http://www.andrew.cmu.edu/user/kb13/big_whls.htm
<http://www.andrew.cmu.edu/user/kb13/misc.htm>

[These 3 addresses are part of the Small Tractors FAQ website. There is much good general information about compact and grey-market tractors here, but many of the contact names are woefully outdated.]

<http://groups.yahoo.com/groups/compacttractorclub> [ACTIVE]*

<http://groups.yahoo.com/groups/greymarkettractorclub> [ACTIVE but barely]*

<http://groups.yahoo.com/groups/mitsubishicompacttractors> [INACTIVE]*

<http://groups.yahoo.com/groups/mitsubishiequipment> [INACTIVE]*

<http://groups.yahoo.com/groups/mitsubishitractors> [ACTIVE; generally has been most useful site, but format changes have left much to be desired.]* **

<http://www.jplan.com/tractor> [ACTIVE; this is home page. Click on "Click to enter the compact tractor board" then on "Mitsubishi" under "Other brands board".]

<http://www.tractorbynet.com> [ACTIVE; this is home page. Click on "Discussions", then on "Mitsubishi/Satoh" under "Group forums". This forum was first started in March 2002 in response to changes Yahoo! made. It appears that many who had been in Yahoo! prefer the Tractorbynet format, which is a big improvement.]* **

<http://www.tractortown.com/wwwboard/> [ACTIVE]

<http://www.ytmag.com> [ACTIVE; this is home page. Click on "Discussion forums", then on "View archives". Use search feature to search for Mitsubishi or Satoh under "Orphans discussion board".]

*To join, start at www.yahoo.com and click on "Groups/Clubs". **The two MOST USEFUL sites.

MAINTENANCE PARTS LISTING

Note: NAPA filters are made by Wix. Many of the part numbers given may be crossed to other manufacturers.

Oil filters for the KE and K3A-K3E diesels are NAPA 1334, except that some Case IH (Mitsu) tractors specify NAPA 1064. The K3H, K3M, K4D, and K4E use NAPA 1381 or 1356, depending on application. The K4F uses NAPA 1344. The Mazda PB gasoline engine uses NAPA 1390. Here is a guide to dimensions (except 1344); all use 20 x 1.5 mm threads:

NAPA#	GASKET diameter	OUTSIDE diameter	Height
1064	2.475"	3.243"	2.944"
1334	2.475"	3.252"	3.194"
1356	2.734"	3.685"	3.402"
1381	2.834"	3.660"	3.141"
1390	3.444"	3.670"	3.141"

Air filters are generally cylindrical with vanes, as is typical of diesel equipment. The NAPA 2276 is 10.375" long, 4.085" body diameter, 5.147" diameter including vanes. The NAPA 6270 is 7.250" long, 3.281" body diameter, 4.218" diameter including vanes. One of these will usually apply. Don't forget the sealing washer.

Fuel filters are NAPA 3264 for the cartridge that goes inside the clear factory sediment bowl/fuel cutoff assembly. The NAPA 3270 is specified as an inline filter for those diesel tractors without this assembly. The gasoline-powered Satohs use the inline NAPA 3007.

Mitsubishi parts for diesel sediment bowl/fuel cutoff assembly mentioned: clear bowl, MM401-876; o-ring, MM404-878. Filter: NAPA 3264.

NAPA tuneup parts for Mazda PB gasoline engine, may apply to other gas models: spark plugs, Champion N4C (NAPA 803); ignition wires, 700172; distributor cap/rotor set, EP710; points, CS360; condenser, EP338.

Paint for grey-market Mitsubishi: Ford "grabber blue" is a close match for hood and fenders on many, NAPA 1951 (J9) in acrylic enamel. "Rebuilders gray" in spray cans from Advance Auto is a close match for frame/engine.

COMPILER:

Edwin (Ed) Krampitz, Jr.

P. O. Box 69

Drewryville, VA 23844-0069

E-mail: ekrampitzjr@hotmail.com

I own a Mitsubishi D2000 II, equivalent to Satoh Bull.

Please note the following:

1. Use this list at your own risk; I originally compiled it for my own use but decided to share. Tell me of additions or problems with vendors. Buyer beware!
2. These vendors do exist to the best of my knowledge. Usually I have contacted them or checked their websites myself, but the whole grey market tractor industry does see rapid change. This list has required many revisions since September 2000.
3. No vendors that sell only complete tractors--that is, no parts or manuals--are knowingly included. This list assumes you have a Mitsubishi/Satoh tractor already. Many grey market tractor dealers are of little help for parts and manuals, as many of you have found out!
4. I cannot be held liable for inaccuracies or omissions. Kindly let me know of corrections I need to make. Also tell me of other vendors--not just an outfit that is simply reselling parts from a vendor on this list, though.

For version 4, special thanks to John Clark, Rick McClain, Bill Rodgers, and Leonard Sheaffer. Thanks to Bill Brykczynski and Davin Brannon for posting the original list in 2000. Canon StarWriter 70 file: Mitsu2A

Version 4, compiled 20 April 2002, superseding these:

Version 3A, corrections to version 3, early 2001; version 3, compiled 21/25 September 2000;

version 2, compiled 5 September 2000; version 1, compiled 20 August 2000